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JAN. 8,
1887.

BUSINESSES WANTED.
BUSINESSES FOR SALE.
PREMISES TO LET.



PARTNERSHIPS.
SITUATIONS WANTED.
SITUATIONS VACANT.

AUCTION SALES
EXCHANGE COLUMN

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Remittances payable to EDWARD HALSE, crossed MARTIN & CO. Stamps are taken in payment.

The Terms for Advertisements in this Supplement will be found printed under each heading.

OFFICE: 42 CANNON STREET, LONDON, E.C.

The VALUE of "THE CHEMIST & DRUGGIST."

TESTIMONY BY ADVERTISERS.

We have recently received many expressions of satisfaction from Advertisers, and amongst them is the following note—

I am most gratified with the results of my advertising in your paper. I consider it by far the better journal for business than any other published. Facts speak for themselves. I find THE CHEMIST AND DRUGGIST mentioned ten times where other of our Trade Journals are once. I cannot allow this opportunity to pass without thanking you for the unremitting attention you have always shown. I must confess I had grave misgivings concerning your alteration from monthly to weekly publication; but, instead of fears, they are a pleasurable knowledge that business has increased wonderfully. (32/22.)

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C., CHEMISTS' TRANSFER AGENTS.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION. Immediate attention given to Foreign Commissions. Terms for Valuation on application. N.B.—No CHARGE TO PURCHASERS.

TENDER.

3s. 6d. for fifty words; 6d. for every 10 words beyond

TO CHEMISTS—The Stock and Fixtures of the late Joseph Walter, 12 Bridge Street, Horncastle, will be offered by Tender; particulars and conditions will be ready by Monday, January 10, 1887; the stock and fixtures can be viewed after that date up to Thursday, January 13. Tenders to be sent to the Executors on the premises not later than 12 o'clock at noon on that day.

TO LET.

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TO LET, an empty corner Chemist's Shop in Wallsend, near Newcastle-on-Tyne, with use of fixtures; a splendid opening for a pushing man; reason for letting it, death of proprietor. Apply, W. Hinde, 3 West Street, Gateshead.

BUSINESS WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A GENUINE Dispensing and Light Retail Business, showing a net profit of not less than £300 per annum; seaside, suburban, or country town preferred; good shop and house essential; must bear strict investigation. Full particulars, in confidence, to "Chemist," care of Mr. White, Lodge Road, Bevois Mount, Southampton.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

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YORKSHIRE.—Drug Business in excellent market town in a large agricultural district; 40 years old; good reasons given for disposing of the same. Address, "Chemicus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

TO BE DISPOSED OF, a Mixed Business in a thriving town in Cheshire; returns, under management of an assistant, £700 to £800 per annum, all ready money; premises on lease; rent £40 per annum; being a branch, immediate possession may be had. Apply to G. H. Morgan, Chemist, Wem, Shrewsbury.

A WELL-FITTED Retail and Dispensing Business in first-class neighbourhood; satisfactory reasons for selling; good house, newly decorated; price £180; no agents. Address, "Chemist," care of Mr. Burgess, Chemist, 12 Fouberts Place, Regent Street, W.

FOR SALE, immediately, Stock and Trade Utensils (fixtures optional) of a smart little Chemist's shop in full working order; stock new and in excellent condition; if required, stock reduced to suit purchaser; liberal terms. A. Lowe, 6 Chapel Street, Lynn, Norfolk.

FOR SALE, a Chemist's Business, situated in main thoroughfare of one of the best business towns in the county of Durham; commodious premises; rent reasonable; stock and fixtures at valuation; in present hands upwards of 20 years; returns £950. Also a branch; returns £550. Apply, X Y Z, A. Davison, Esq., 11 Newgate Street, London, E.C.

CHESHIRE.—Good-class Village Business; Light Retail and Prescribing; present returns about £320 at first-class prices, by assistant; good house; rent £25 per annum; price £250; a principal would soon do £500 a year. Apply, W. L. Taylor & Co., Crown Buildings, 79 Queen Street, Cheapside, E.C.

SUSSEX.—Good-class Retail, Dispensing, and Prescribing Business; unopposed, and returning about £1,000; net profit over £450; good house and garden; moderate rental; very old-established; recently re-fitted; death cause of sale; only £700 to effect an early transfer. Apply to Messrs. Berdoc & Co., 30 Jewry Street, Aldgate.

SPLENDID well-fitted (mahogany) stocked Shop; good position, eight miles out; rapidly increasing, good-class neighbourhood; high prices obtained; returns £400; dentist attends twice a week; commission at present pays half the rent; ill-health; to immediate purchaser £195, or £60 goodwill, stock and fixtures at valuation. 135/16, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

GLOUCESTER.—For immediate disposal, in consequence of the sudden death of Mr. Johnson, a genuine old-established Chemist's Business; good Prescribing trade; splendid opportunity for pushing man with small capital; good opening for dentistry; situated in main thoroughfare. For particulars, apply 83 Barton Street, Gloucester; good house, large garden.

GOOD-CLASS PHOTOGRAPHIC BUSINESS, with Chemist's adjoining; best position, and good residence; or will accept qualified Chemist as Partner; easy terms, if desired, upon approved security. Particulars from "Chemist," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

THROUGH unexpected circumstances. — A thoroughly genuine light Retail and Dispensing Business (sea-side), of good repute, and open to every investigation, is for sale; principals only having at least £1,150 at command. Apply by letter, giving references, to "Viola," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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WANTED, immediately, for the Straits Settlements, a thoroughly efficient Dispenser, possessing a fair knowledge of bookkeeping and good business habits; to an energetic man willing to work this is an exceptional opportunity; a good salary will be given and passage paid out; the strictest references required as to character and sobriety. Apply personally before noon, Fletcher, Fletcher & Stevenson, North London Chemical Works, Holloway, N.

WANTED, District Agents for an old-established firm of drug merchants; must be acquainted with the wholesale drug trade. Address, P. S. 400, care of Messrs. Deacon's Advertisement Offices, Leadenhall Street, London, E.C.

AGRA (INDIA).—Wanted at once, a good Manufacturing Pharmaceutical Chemist; salary first year, 150 rupees per month, second year 175 rupees, third year 200 rupees; free quarters; second-class passage paid out; three years' engagement. Candidates, who must hold undeniable references, and should hold Major qualification, apply, sending photo, to J., Messrs. Evans, Lescher & Webb, 60 Bartholomew Close, E.C.

IMMEDIATELY; Junior Assistant; accustomed to a good-class mixed country business; state age, height, salary required, and other particulars, enclosing photo. W. H. Ombler, Market Weighton, Yorks.

DISPENSER (non-resident) required at a large County Asylum. Candidates must be under 35 years of age, and must furnish unexceptionable references as regards moral character, sobriety, and dispensing ability; they must also be neat bookkeepers. Printed forms of application will be supplied on request, if accompanied by a stamped directed envelope. Medical Director, West Riding Asylum, Wakefield.

DRUGGISTS' SUNDRIES.—Wanted, a Country Traveller. Address, Ayrton & Saunders, 149 Duke St., Liverpool.

TRAVELLER.—An old established Drug House extending their business are desirous of engaging the services of a gentleman of experience (with a connection) to represent them in Yorkshire and East Lancashire. Address, in first instance, with full particulars, to "Wholesale Druggist," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

WANTED, immediately, a good Junior; age not under 20, for a light Retail and Prescribing trade. Address, stating age, height, references, and salary required, enclosing carte, to W. Jacobs, 72 High Street, Guildford, Surrey.

FOR a Light Business; an Outdoor Assistant of good appearance and address; must be steady and active, of good experience and business habits; state age, height, salary, and the usual particulars, enclosing carte, to be returned. E. Presley, 12 St. Augustine's Parade, Bristol. Applications not answered declined.

ASSISTANT Wanted for Counter Work, in pushing trade; not over 30; must be an active man, and of good business ability and address; qualified preferred; good character and well recommended by last employer. References, salary, and full particulars to Wm. Inman & Co., Lim., 46 Leith Street, Edinburgh.

A GOOD RELIABLE JUNIOR required; total abstainer preferred. Enclose carte, to be returned, and send full particulars to W. E. Giles, Pharmaceutical Chemist, Newport (Mon.).

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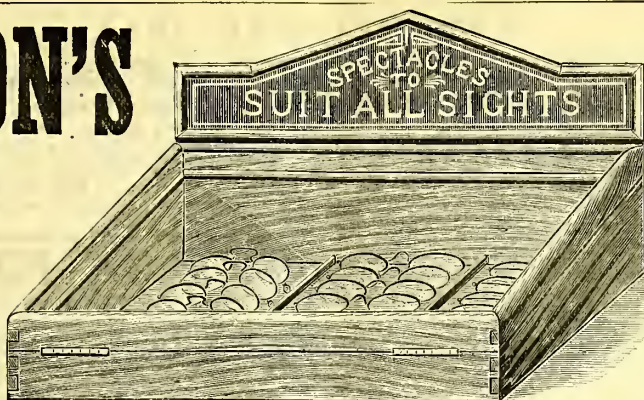
A CHEMIST by examination, with good knowledge of manipulation, wishes for a situation in a laboratory or factory; first-class references; disengaged. Kindly apply to M. Kahle, 52 St. Mary's Road, Edmonton.

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"THE CHEMIST AND DRUGGIST," May 15, 1886, says:

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1 " Ditto, better quality, stout frames, Straw or Blue Steel " 2/6 "	10	6
1 " Folders, Steel Frames and Placquets " 1/0 "	5	6
1 " Leather Tuck Spectacle Cases " 6d. each	2	6
1 " Folder Cases " 4d. "	1	6
Show Case and Sight Tester	15	0
	£2	2 0

Our £3 3s. Case contains—

	s.	d.
2 Dozen Steel Frame Spectacles, Joints, with Screw and Pin to sell 1/0 per pair	7	0
1 " Better quality ditto, Straw or Blue Steel, best White Glasses " 3/6 "	15	0
1 " Folders, Steel Frames and Placquets " 1/0 "	5	6
1 " Best Nickel Folders " 3/6 "	16	0
1 " Spectacle Cases, Leather " 6d. each	3	0
1 " Folder Cases " 4d. "	1	6
Show Case and Sight Tester	15	0
	£3	3 0

Our £6 6s. Show Case contains—

	£	s.	d.
2 Dozen Steel Frame Spectacles, Joints, with Screw and Pin to sell 1/0 per pair	7	0	
1 " Ditto, better quality " 1/6 "	6	6	
1 " Ditto, better quality, stout frames, Blue or Straw Steel " 3/6 "	15	0	
1 " Light Straw Steel Spectacles " 5/6 "	1	4	0
1 " Folders " 1/0 "	5	6	
1 " Ditto, Nickel " 3/6 "	16	0	
1 " Ditto, light grooved, invisible " 5/6 "	1	1	0
1 " Frog Mouth Cases " 1/0 each	7	0	
1 " Tuck Cases " 6d. "	2	6	
1 " Folder Cases " 4d. "	1	6	
Large size Show Case and Sight Tester	1	0	0
	£6	6	0

Our £10 10s. Case contains—

	£	s.	d.
3 Dozen Steel Spectacles, Joints, with Screw and Pin to sell 1/0 per pair	10	6	
2 " Ditto, better quality " 2/6 "	1	1	0
1 " Light Straw Steel ditto, best White Glasses " 5/6 "	1	4	0
1 " Invisible ditto, ditto " 6/6 "	1	10	0
1 " Blue and Straw Steel Frames, with Pebble " 7/6 "	1	13	0
2 " Tinted Spectacles, assorted colours " 2/6 "	10	6	
1 " Folders, Steel Frames and Placquets " 1/0 "	11	0	
1 " Ditto, Nickel and Shell Placquets " 3/6 "	16	0	
1 " Ditto, Light Invisible " 5/6 "	1	1	0
1 " Best Morocco Frog Mouth Cases " 1/0 "	7	0	
1 " Leather Tuck " 6d. "	2	6	
1 " Folder Cases, best " 6d. "	1	1	0
Large size Show Case and Sight Tester	1	1	0
	£10	10	0

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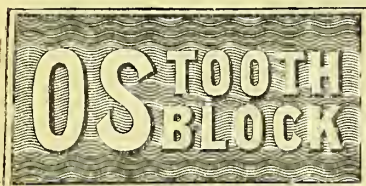
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LABELS of every description. **SLIP LABELS**, 10,000 (10 W's), 1s. per 1,000. **PRICE LISTS**, Pamphlets, Circulars, Billheads, Memorandums, Cards, and all kinds of Printing and Stationery required by Chemists at most Moderate Prices. **STOCK SHOW CARDS**, Gold on Black, Gilt Bevelled Edges, size 10 in. x 6½ in. for various specialities; Samples 9d. each, post free. **SOLE AGENTS for CHARLES RICHARD'S PATENT PERFECT TUBE CLEANER FOR INFANTS' BOTTLE TUBES**, 6s. 3d. per gross; Carded, 8s. per gross.

AGENTS FOR REGISTRATION OF TRADE MARKS.

DESIGNS FURNISHED IF REQUIRED.

THE BEST & SAFEST DENTIFRICE. OSCAR SUTTON & CO., Preston, Lancashire.



REGISTERED TRADE MARK.

The following Testimonial from Mr. JAMES A. REID, Chemist and Druggist, Helensburgh, we quote by special permission: "Enclosed please find cheque in payment for the Tooth Blocks. I am highly pleased with their new form and extra inducements presented through the leatherette labels and chemist's own name stamped on each block. These give one special encouragement to keep prominently before an intelligent public what UNDOUBTEDLY IS THE GREATEST DENTIFRICE OF THE AGE."

No. 0.
Loose, without Boxes.

No. 1.
In Patent Metallic Boxes,
retail 1s.

No. 2.
In Crystal Caskets,
retail 2s. 6d.

OVER 1,000 TESTIMONIALS.

BATTLE'S VERMIN KILLER. { Mice eat it readily and Die on the spot.



Has an immense Sale, and wherever introduced never fails to give satisfaction.—Mice appear attracted to it as by magic, eat it readily, tumble over, and die on the spot. Rate usually die in their runs.—Parties troubled with Vermin may be cleared at once, either from Stacks, Houses, or Ships.

TESTIMONIALS.—Thousands might be published.

From Mr. THOMAS COLTON, Agent for Selby.—A friend of mine purchased a Packet of your VERMIN KILLER last night, doubting its efficacy to-day he called in to say that he had found fifteen dead mice, and had only used part of a packet.—From Mr. EDWARD STURDY, Flemington Mills.—I duly received by post the Packet of your VERMIN KILLER, and found it as represented in your advertisement. It speedily destroyed all the mice in my granary. I enclose 2s. for two more Packets.—Leeds, November 6th, 1887.—I have tried BATTLE'S VERMIN KILLER, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS S. CROSLAND.—Mr. Stead.

Sold in Packets, 3d., 6d., and 1s. each.

SOLE PROPRIETOR:

Mr. J. R. BATTLE, Chemist, Lincoln, England.

No Chemist or Storekeeper should be without a supply.

A daily luxury for rich and poor.

VAN HOUTEN'S COCOA

Guaranteed Pure and Soluble,

Is simply unequalled, and although a little dearer really the cheapest in the end.

A cup of this cocoa costs no more than a cup of tea, and is a highly nutritive beverage.

Digested with marvellous facility by the most delicate invalids and children.

Made instantly with boiling water.

The **British Medical Journal** says:

"Van Houten's Cocoa" is admirable. In flavour it is perfect, and it is so pure, well prepared, and rich in alkaloid that it may with great advantage be largely used in public institutions, as well as in private families."

The **Lancet** remarks: " . . . It goes a long way, and is really cheaper to use in the end, etc., etc."

Invaluable in railway stations, hospitals, on board ship, in the camp, for workmen (at home and to take to their work), etc., etc.

Try it once and you will use and recommend it always.
Sample tins free through your Grocer or Chemist.

TOWER TEA

A SAFE and PROFITABLE addition to a Chemist's Business.



The London Broken Tea ... 1/8

The London Two Shilling Tea... 2/-

The London 2/8 Assam Tea... 2/8

For Testimonials and References see the full page Advertisement which appears monthly in this Journal. Last insertion December 25, 1886, page 19.

THE GREAT TOWER STREET TEA CO., LIMITED
LONDON.

CHEMISTS' TEA AGENCY.

WALKER & DALRYMPLE'S

BROKEN-LEAF TEA, 1s. 8d. per lb.

A MONEY SAVING TEA. ABSOLUTELY PURE.

The small leaf from some of the finest India and China Teas. Produces a Tea in the cup, stronger, richer, and cheaper than most whole-leaf Teas. Agents appointed, where unrepresented, throughout the United Kingdom.

WALKER & DALRYMPLE'S

INTERMEDIATE TEA, 2s. per lb.

BEST at the PRICE EVER SOLD. Great strength and a most useful Tea where there is a large consumption. Recommended to all who wish to SAVE in their Tea. Agents appointed, where unrepresented, throughout the United Kingdom.

WALKER & DALRYMPLE'S TEAS.

AGENTS APPOINTED, where unrepresented, throughout the United Kingdom.

Prospectus and Samples Free on Application.

Warehouses, 154, 155, 159 and 160 WHITECHAPEL ROAD, and 2, 4, 6, 8, 10, 11, and 12 BRADY STREET, LONDON.

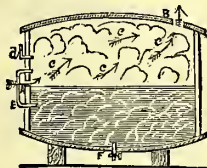
P.O.O. payable at head office. Bankers, the National Provincial Bank of England.

"laden with the scent of flowers,
And breath of odorous Spring."

SPINNER'S TEAS.

A company of Merchants are now selling through SPINNER & CO. the choicest Teas that come from India and China at 2/8, 2/4, 2/, and 1/8 a pound, in packets only. These are the perfection of Teas, and will please the most fastidious.—Agents wanted in every town and village. For Terms apply to SPINNER & CO., 60 Strand, London.

SPINNER & CO., London and Liverpool.



NEW METHOD OF MAKING VINEGAR,
BY THE REVOLVING APPARATUS
(Michaelis' Patent).

For further particulars

See the Chemists' and Druggists' Diary, 1884, page 274,
OR APPLY TO

PAUL ROTHERMEL,

105 (late of 27) LEADENHALL ST., LONDON.

12½ gals. for £1, Cask free.
SPECIAL LINES FOR CASH BUYERS.

TYRER'S
WORCESTER SAUCE,
YORKSHIRE SAUCE,
"BOROUGH" KETCHUP.
BEST VALUE THAT MONEY CAN PURCHASE.

Prices and Samples sent free of all cost by
PETER TYRER, The "Borough" Ketchup & Sauce Maker,
LONDON, S.E.



MASON'S
ESSENCE
OF BEEF.

CONCENTRATED BEEF TEA.
MEAT LOZENGES, &c.

The Trade would study their interests by introducing our preparations to their customers, for the reason that they are not only the best made, but at the same time the cheapest, and bear a larger margin of profit. A small trial order will prove the truth of the above statement.

Proprietors of the Delicious

"O. K." SAUCE.

GEORGE MASON & CO., Ltd., 417 KING'S ROAD, **LONDON, S.W.**
CHELSEA.

Edwards' BY ROYAL
LETTERS PATENT.
HIGHEST
AWARDS: **Desiccated**

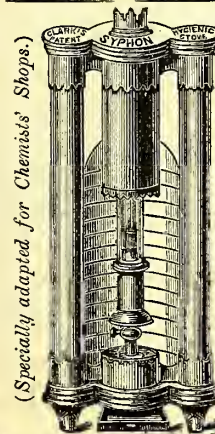
Soup.
International Health Exhibition, LONDON, 1884.
International Exhibition, LIVERPOOL, 1886.

Consists of the finest Vegetables and Extract of Beef in a dry state.

The Manufacturers beg to direct the attention of the Trade to the above article, now commanding a ready and remunerative sale. It is put up in a neat and attractive form, in 1-lb., 2-lb., and 4-lb. tins, to sell at 1s. 3d., 8d., and 4d.; also in packets containing 1 oz. at 1d. These are packed in cases of 36 1-lb., 48 2-lb., or 72 4-lb. tins; the 1d. packets in gross and half-gross boxes, in cases of 12 gross; carriage, tins, and cases free. A liberal supply of Show Cards, Glaciers, and printed matter, consisting of Circulars, Medical Testimonials, Press Opinions, and Counter Bills bearing name and address.

Sample, with Terms, free on receipt of Business Card.

FREDK. KING & CO., LIM.,
26 WARING STREET, BELFAST, and
6 Bishopgate Avenue, LONDON.



THE
"SYPHON"
(REGISTERED TITLE)
(CLARK'S PATENT)
GAS HEATING STOVES.

NO FLUE REQUIRED.

No smoke. No smell. No dirt or trouble. No danger. All sulphurous vapours are condensed inside the Stoves, and passed off as a liquid into tray beneath. The ONLY SAFE ones for use in Hospitals, Sick Chambers, Greenhouses, Bedrooms, Halls, Shops, Offices, Churches, Schools, &c. **BEWARE OF IMITATIONS.**

Price Lists and Terms on application to

S. CLARK & CO., Patentees
(Late Hygienic Heating & Lighting Co.),
Park Street Works, Islington,
LONDON, N.

Agents: MAW, SON & THOMPSON, Aldergate Street, London, E.C.



LAZENBY'S HARVEY'S SAUCE

For FISH, GAME, STEAKS, &c. In use for now
nearly a century.

CAUTION.—Each bottle of the celebrated Sauce prepared from the ORIGINAL RECIPE bears the well-known Label signed “Elizabeth Lazenby,” without which none can be genuine.

E. LAZENBY & SON, 18 Trinity Street, London. S.E.

LAZENBY'S SOUPS

Soups in Tins

MULLIGATAWNY

OXTAIL

GRAVY

&c. &c.



Soups in Tins

MOCK TURTLE

JULIENNE

HARE

&c. &c.

These Soups are prepared ready for immediate use, and when heated require no other addition than that of Water.

E. LAZENBY & SON, 18 Trinity Street, London. S.E.

BARRETTS PATENT STOPPERS

MIXED PICKLES
 PREPARED BY
E. LAZENBY & SON
(6 EDWARDS STREET, PORTMAN SQUARE)
 18 TRINITY STREET
 LONDON. S.E.

HARVEY'S SAUCE. — CAUTION. — The admirers of this celebrated Sauce are particularly requested to observe that each bottle bears the well-known label signed "ELIZABETH LAZENBY"; this label is protected by perpetual injunction in Chancery of the 9th July 1853 and without it none can be genuine.

Elizabeth Lazenby

AGENTS FOR THE UNITED KINGDOM
E. LAZENBY & SON, LONDON.

EIGHT PRIZE MEDALS AWARDED.

GOODALL'S HOUSEHOLD SPECIALITIES.

Yorkshire Relish

THE MOST DELICIOUS SAUCE IN THE WORLD.

This cheap and excellent Sauce makes the plainest viands palatable, and the daintiest dishes more delicious. To Chops and Steaks, Fish, &c., it is incomparable. Sold by Grocers, Oilmen, Chemists, &c., in Bottles, 6d., 1s., and 2s. each.

CAUTION.—On each Yorkshire Relish Label is a Willow Pattern Plate and name, GOODALL, BACKHOUSE & Co. No other is genuine.

Goodall's Baking Powder

THE BEST IN THE WORLD.

Makes delicious Puddings without Eggs, Pastry without Butter, and beautiful light Bread without Yeast. In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

Goodall's Quinine Wine

The best, cheapest, and most agreeable tonic yet introduced. The best remedy known for indigestion, Loss of Appetite, General Debility, &c. Restores delicate individuals to health and vigour. In Bottles, 6d., 1s., and 2s. each.

Goodall's Custard Powder

For making delicious Custards without Eggs, in less time and at half the price. Unequalled for the purposes intended; will give the utmost satisfaction if the instructions given are implicitly followed. Sold in boxes 2d., 6d., and 1s. each.

Goodall's Blanc Mange Powder

Is acknowledged by all to be the most convenient and economical preparation ever introduced, as, by its use, a most Rich and Delicious Blanc-mange may be produced in a few minutes at a trifling cost, and may be had of various flavours, i.e., Raspberry, Strawberry, Lemon, Almond, and Vanilla. Sold in Packets, 6d. and 1s. each.

Goodall's Egg Powder

Acknowledged to be the only real substitute for eggs yet discovered. Its action on Oakes, Puddings, &c., &c., resembles that of the egg in every particular, enriching them in colour and flavour, rendering them most wholesome and nutritious. One sixpenny tin will go as far as twenty eggs. In 1d. Packets; 6d. and 1s. Tins.

SOLE MANUFACTURERS—

GOODALL, BACKHOUSE & CO.,
WHITE HORSE STREET, LEEDS.

A monthly Price List of Druggists' Sundries, Patent Medicines, &c., can be had post free on application.

10

Coleman's Liebig's Extract of MEAT & MALT WINE

Hundreds of Testimonials
which are
evidence of
its
Medical
Value

Is a Delicious Beverage and Tonic made from Port Wine, Liebig's Extract of Meat and Extract of Malt.

**NUTRITIOUS, STRENGTHENING,
STIMULATING,**
Flesh-forming, and Health-restoring.

SUITABLE FOR THE ROBUST IN HEALTH
AS WELL AS THE INVALID.

Important Unsolicited Testimonial from
M. K. HARGREAVES, Esq., M.D.

Wellington House, Bruce Street, Leeds.

Messrs. COLEMAN & Co.

January 12, 1885.

Gentlemen,—I received sample bottle of your "Extract of Beef and Malt Wine." I find that it is the same as I used extensively over two years ago, and which I found of so much benefit that I have used it ever since in my practice, and numbers of my patients get it for themselves. I have great confidence in it as a tonic and restorative. It is also very useful in cases of consumption.

I wish you would send me one dozen bottles, and then will send you money by return. You can send it by rail by G.E.R. on to the G.N.R., and then it will come direct to Leeds.

I am, yours truly,

M. K. HARGREAVES, M.D.

Sold by all Druggists, Wine Merchants, and Patent Medicine Vendors in the United Kingdom, in Bottles, 2s. 9d. and 4s. 6d. each.

Ask for COLEMAN'S LIEBIG'S EXTRACT OF MEAT AND MALT WINE, and "see that you get it."

2/9 size, 30s. per doz. 4/6 size, 50s. per doz.

Carriage paid to any Railway Station in Great Britain.

Sample Pint Bottle sent free by Post on receipt of 33 stamps.

The following Preparations have also been introduced by the Manufacturers:—

Coleman's Liebig's Extract of Meat and Malt Wine (WITH IRON), in Bottles, 2/9 and 4/6 each.

Coleman's Liebig's Extract of Meat and Malt Wine (WITH QUININE), in Bottles, 2/9 and 4/6 each.

SOLE MANUFACTURERS—

COLEMAN & CO.,
GILDENGATE ST., NORWICH.

TRADE PRICES ON APPLICATION.

REDUCED PRICES FOR MEDICAL BOTTLES

Superior Quality, Plain and Grad., any Shape.

3 oz. & 4 oz. 6 oz. & 8 oz. 10 oz. & 12 oz.
6/ 7/ 10/9 per gross.

Panelled, Pale Green, Best Quality.

1½ oz. & 2 oz. 3 oz. & 4 oz. 6 oz. & 8 oz. 10 oz. & 12 oz.
6/8 7/3 8/3 12/ per gross.

N.B.—Not less than 6 gross assorted sizes sold at the above prices.

Equally low quotations for FLINT Bottles of all kinds.

THE NEW "QUININE" TINTED MEDICALS.

BOTTLES MADE FOR "SPECIALITIES."

Flint Vials, Moulded, Good Quality.

1 dr. 2 dr. ½ oz. 1 oz. 1½ oz. 2 oz. 3 oz. 4 oz.
2/5 2/8 2/10 3/3 3/11 4/6 6/ 7/ per grs.

Not less than 10 grs. assorted sizes at these prices.

"IMPROVED" BENT

FEEDING BOTTLES

With 7-inch black fittings, for grs., 27/; and lettered with any name and design free for 5 grs. orders.

Glass Screw "Feeders," with 7-in. Black Fittings, for grs., 33/.

All "Sundries" equally cheap, and guaranteed of a superior quality.

T. W. SIMCOCK,
17 Guildford St., LEEDS.

PERKEN, SON & RAYMENT

(LEJEUNE & PERKEN),

ESTABLISHED 1852,

Manufacture

Catalogue Free.

SPECTACLES.—SPHERICAL, CYLINDRICAL, SPHERO-CYLINDRICAL.

MICROSCOPES, TELESCOPES, THEODOLITES

SEXTANTS.—MATHEMATICAL INSTRUMENTS.

ELECTRIC APPARATUS.—MEDICAL AND OTHERWISE.

BAROMETERS.—MERCURIAL AND ANEROID.

OPERA, FIELD, AND MARINE GLASSES.

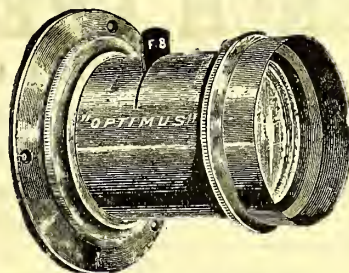
SPECIFIC GRAVITY INSTRUMENTS.

THERMOMETERS.—CLINICAL, CHEMICAL, AIR, &c., &c.

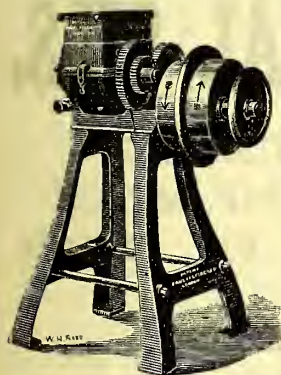


MAGIC LANTERNS OF ALL SIZES, AND SLIDES.

PHOTOGRAPHIC CAMERAS, LENSES, &c., &c.



Hatton Garden, London, E.C.



CHEMISTS' MACHINERY.

PILL MASS KNEADING MACHINES.

PILL MAKING MACHINES.

DRUG GRINDING MACHINES.

SIFTING MACHINES.

FULL PARTICULARS OF ABOVE ON APPLICATION TO

WERNER & PFLEIDERER, 86 Upper Ground St., LONDON, S.E.

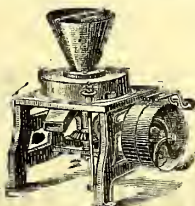
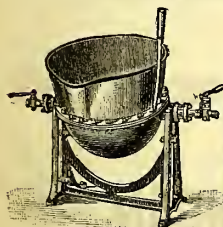
Blackfriars Bridge,

JOSEPH BAKER & SONS, 58 City Road, LONDON, E.C.

Awards received for our Machinery:—3 Medals, including "THE GOLD MEDAL," Health Exhibition, London, 1884;

DIPLOMA OF HONOUR, Amsterdam, 1886;

2 GOLD MEDALS—HIGHEST AWARD—Edinburgh, 1886.



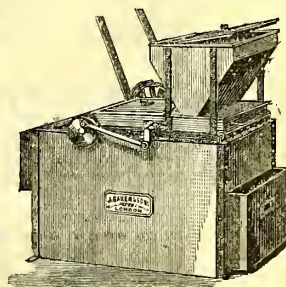
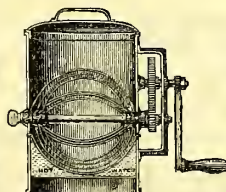
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Machines.



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MANUFACTURING CHEMISTS,

DISTILLERS AND IMPORTERS OF

ESSENTIAL OILS AND FRUIT ESSENCES,

INVENTORS OF

SOLUBLE ESSENCES FOR AERATED WATER
AND CORDIAL MANUFACTURERS.

FRENCH CREAM GUM EXTRACT,

PROTECTED BY ROYAL LETTERS PATENT,

For producing a head of Creamy Richness upon all kinds of Syrups, Aerated Waters, Beers, Ales, Cider, Champagne, &c., 2s. 6d. per pound.

W. J. BUSH & CO. regret having to Caution the Trade against spurious imitations of this article, most of which are mere rubbish.

W. J. BUSH & CO.'S ENGLISH DRAWN ESSENTIAL OILS.

OL. AMYGD. ESSENT. ANG.

OL. AMYGD. ESSENT. ANG.

Sine Acid. Prussic.

OL. ANETHI ANG.

OL. CARUI ANG.

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} W. J. BUSH & CO.'S SPECIALITY.

ARTILLERY LANE, BISHOPSGATE, LONDON.

SUPPLEMENT TO "THE CHEMIST AND DRUGGIST."

SATURDAY, JAN. 8, 1887.

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Telephone Number,

Advertisers' & Buyers' Reference List,

TELEGRAPHIC ADDRESS—

CHEMISTS

AND INDEX TO ADVERTISEMENTS.

LONDON.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

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ALLEN & HANBURY'S
Cold-liver Oil, Malt Extract, Tinctures, Extracts,
&c., Wholesale Druggists COVER
APOLLINARIS CO.
Apollinaris Water 21, Hunyadi Janos 24
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School 4
LONDON HOMOEOPATHIC HOSPITAL
Hospital and School 4
LYNCH & CO. Dispensing Bottles, "L" Brand COVER
MANCHESTER COLLEGE OF PHARMACY... 4
MASON, GEORGE & CO. (LIM.)
Essence of Beef, Meat Lozenges, &c. 7
MAUBERT'S SOAPS *Althaea* 25
MAY, ROBERTS & CO. *Seltzogenes* 18
MAY & BAKER
Mercurials, Ethers, Camphor Tablets, COVER
MCKESSON & ROBBINS *Ovoid Capsuled Pills* 25

MEADOWCROFT, W., Sol. Ess. Jamaica Ginger 17
MEINERTZHAGEN
Sarsaparilla and Ipecacuanha 35
METCALF, THEODORE *Coca Wine* 25
METZ, P. *Willow Bases* 23
MILLS & CO. *Bourne Aerated Waters* 21
MILNE, SONS & MACFIE *Disinfecting Cover* 33
MORPHY, EUGENE *Walnut Pomade* 35
MUMFORD, G. S.
Limeed, Sarsch, Fuller's Earth, &c. TEXT 40
MURRAY, SIR JAMES
Fluid Magnesia, Fluid Camphor 24
NEWBALL & MASON *Non-Intoxicating Beer* 16
NOAKES *Metallic Casks, Drums, Kegs, &c.* 34
OAKLEY & SONS *Emery Cloth & Knife Polish* 34
ORRIDGE & CO. Transfer Agents Coloured Supp. 34
OSCAR, SUTTON & CO. Tooth Blocks Dentifrice 6
PATTISON, GEORGE Linn and Chest Protector 35
PERKEN, SON & RAYMENT
Photographic Apparatus, &c. 11
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Vinegar-making Machine 7
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SANTAS CO. (LIM.) *Disinfectant*, TEXT 40
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SCHULZ, FRITZ JUN. *Brilliantine* 34
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SMITH, T. J. *Cod Liver Oil* 23
SPINNER & CO. *Spinner's Teas* 7
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STEVENS, P. F. A. *White Gutta-percha* 37
TAYLOR, T. & F. J. *Aerated Waters* 22
TOOGOOD, W.
New Premises, Earthenware Covered Pots 31
TYLER, HAYWARD, & CO. *Steam Engine* 17
TYKE & KING
Pure Acids, Essences of Pear and Pine Apple 35
TYRER, P. *Novice of Removal* 6
VACCINE ASSOCIATION Pure Vaccine Lymph 30
VAN HOUTEN'S COCOA 6
WALKER & DALRYMPLE *Tea* 32
WALKER, TROKE & CO. *Export Druggists* 32
WATERSTON, GEO., & SONS *Sealing Wax* 24
WERNER & FLEIDERER
Chemists' Machinery 11
WEST, THOMAS *Ock's Mouth Broom* 32
WOLTERS, OTTO, Balances, Coloured Supplement 32
WYLYES & CO.
Coated Pills, Pharmaceutical Wholesale Druggists
YEATMAN, F. J. *Syr. Hypophosph. Comp.*

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AERATED AND

MINERAL WTS

Apollinaris (Hunyadi, Friedrichshall, and Apollinaris)
Barnett and Foster
Carter, H. W., & Co. (Ginger Ale Essence)
Chemists' Aerated Waters Association
Durrant, Geo. & Co.
Ellis (Ruthin)
Gallia, E. (Min.)
Hassall and Co. (Citric Acid, Phospho)
Hay, W. (Hop Ale Essence)
Hunyadi Janos
Idris and Co.
Ingram and Royle (Mineral and Vichy) Sauerbrunnen
Jewbury and Brown
Kinmond
Meadowcroft, W.
Mills and Co. (Bonnes)
Monterrat
Scheweppe and Co.
Stevenson and Howell
Taylor, T. and J.
Vichy Thermal
Williamson, W.H. (WatrDrnk) [See INDEX ALK.]

DITTO PLANT

[See SYPHONS AND ESSENCES.]

Barnett and Foster
Brady and Hinchliffe
Bush, W. J., & Co. (Foam Producer, &c.)
Favarger, H.
Quev's Ethers
Meadowcroft, W.
Tyler, Hayward, and Co.

ACETIC ACID

Dunn and Co.
Hirst, Brooke and Hirst
Lindsey and Co.
Morris and Callard (Salts)

ALKALOIDS

Howards and Sons (Cinchona)
Smith, T. and H.

AMMONIA

May and Baker

APPARATUS

Follows and Bates
Knowles, J. (Balances)
Maud, W. R.

AGENCIES

ABROAD

Cocking (Japan)
Drysdale, J. W., & Co.
Elmer and Mendelson (Philadelphia)
Evans, Sons and Mason (Canada)
Felton (Melbourne)
Fougers (New York)
Hormusjee Ruttonjee (Bombay)
Kempthorne (N.W. Zealand)
Lennon (Port Elizabeth)
MacNaughtan (New York)
Mayhew, E. (Watr. Australia)
Phillips and Co. (Bombay)
Prosser, E., & Co. (Sdny)
Roberts (Paris, &c.)
Rocke (Melbourne)
Sharland & Co. (Auckland N.Z.)
Shirreffs and Co. (Allahabad)
Stallman and Fulton
Symes and Co. (Simla)

ALMANACKS

Bowers Bros.
Ford, Shapland and Co.
Kay Bros.
Silverlock, H.
Townsend, J.

BANK

Birkbeck Bank

BATHS

May Roberts (Water)

BEESWAX & HONEY

Bowdler and Co.
Kemp, W., and Son
Woolley, Sons and Co.

BENZENE, &c.

Sanger and Sons

BICARB. SODA

Gaskell, Deacon and Co.

Howards & Sons

May and Baker

BISMUTH PREP.

Howlett and Sons
Howards and Sons
May and Baker
Sellers, J.

BLACKING

New Military Blacking Company
Jamieson and Co.

BOOKS

Churchill, A. and J.
Cottin's, Dr.
Whitla, W., M.D.

BOTANIC BEER

Newball and Mason

BOTTLE CAPS

Hunt, W. F., and Co.

BOTTLES

Barnett and Foster
Brady and Hinchliffe
Brooks, Peel (Perfumers)
Glasgow Apothecaries' Co.
Hearn, Riddle and Co.
Isaacs and Co.
Kilner Bros.
Lang, Jones and Jules
Lynch and Co. ("L" Brand)
Morrison, R., and Co.
Poths
Thompson, Millard and Co.
(Seeding)
Toogood
Valley

BOXES

Austin and Co. (Cardboard)
Ayrton and Saunders (Willow)
Bremer, Aug. (Cardboard
Folded)
Ivin and Sellers
Metz, F. (Willow and Willow)
Self-Opening Tin Box Co.

BROMIDIA

Battle and Co.

BRONCHITIS

KETTLE.
Sanger and Sons

BRUSHES

Dukas and Co.
Newbery and Sons

BUTTER COLOUR,

&c.

Bush, W. J. and Son (Mari-
goldine)
Meyer and Henckel

CAMPOR

Howards and Sons
Keene and Ashwell (Homoeo-
pathic)
May and Baker
Murray, Sir James (Fluid)

CAPSULES

Betts and Co. (Metallic)
Denoual, J. (Medicinal)
Hoover, B. and Co.
Metz "Acme" Brand)

CARMINE

Bush, W. J., and Co.
Sellers

CASTOR OIL

Allen and Hanbury

CEMENT

Foulkes
Kay (Coaguiline)

CHALK PRECIP.

Dunn and Co.
Levermore, Aug. and Co.

CHEMICALS

Bernstein Vogt (Fine)
Bramwell, E., and Son
Brunner, Mond and Co.
Bush, W. J. and Co.
Dunn and Co.
Fletcher, Fletcher & Stevenson
Gaskell, Deacon and Co. (S)
Carbonate of Soda)
Howards and Sons (Pharma-
ceutical)
Lindsey, C. R., and Co.
May and Baker
Morris, Cullard, and Co.
Petri Bros.
Sumner, R., and Co.
Smith, T. and H.
Tyke and King
Walker, Troket and Co.
Wink, J. A., and Co. (Fine)
Zimmermann, A. and W.

CHEST PROTECTRS

Evans, Sons and Co.
Haywood, J. H.
Newbery and Son
Thompson Millard & Co.
Toogood, W.

CHLORODYNE

Blyton-Bage and Co. (Twem-
low's)
Davenport (Browne's)
Towle, A. P.

CHLOROFORM, &c.

Duncan, Flockhart
Macfarlan, J. F.
Petri Bros.
Smith, T. and H.
Wink, J. A., and Co., Lim.
Zimmerman

CHRISTMAS

Cubley and Preston (Sparkling
Frost)

CITRIC ACID

Hassalls (Phospho)

COCAINE

Howards and Sons

COCOA & CHOCLETE

Cadbury
Fry (Malted)
Richards, J. M. (Delacere's)

COD-LIVER OIL

Allen and Hanbury
Burroughs, Wellcome
Burgoyne (Pepeteline)
Hertz & Collingwood
Smith, T. J.
Southall Bros. and Barclay
Woolley, Sons and Co.

COFFEE

George and Welch (Dandelion)

COLLAPSIBLE

TUBES

Brooks, H., Peel and Co.

COMP. POWDER

Raines and Co. (Essence of)

EMPRSSD MDCNS

Allen and Hanbury's
Burroughs, Wellcome and Co.
Hooper, B., and Co.
Leo's Tablets
Newbery and Sons

CORN CURES

Robinson, B.
Young's

COTTON WOOL

Robinson and Sons (Absorbent)
Sanger, J., and Sons

DENTIFRICES

Beddard, J.
Jewsbury and Brown
Martin, J. W. (Rozallum)
Newbery and Sons
Rimmel
Sutton, O., and Co.
Thompson and Capper
Woods, W. (Arecia Nut)

DENTISTRY

Jones, Dr. C. H. (Mechanical)

DISINFECTANTS

Government Sanitary Co.
Harrison and Co. (Hydrochloric)
Milne, Sons & Macfie (Disin-
fectant)
National Chemical Co.
Rimmel
Sanitas
Steele & Co. (Chloride of Lime)

DOG MEDICINES

Spratts (Patent)

DRESSINGS, SURG.

[See SURGICAL.]

DRUMS, CANS, &c.

Noakes and Co.

DRUGGISTS' SUP.

Ayrton and Saunders
Bousie, Johnson
Evans, Lecher and Webb
(Hawley's Counter Adjuncts)
Evans, Sons (Savars)
Lynch and Co.
Maud, W. R.
Maw, S., Son and Thompson
May, Roberts and Co.
Newbery, F., and Sons
Pattinson, Geo.
Sanger and Sons
Savars
Schutze and Co.
Thompson, Millard
Toogood

DUBBIN

Dales, J. T.
Jamieson and Co.
New Military Blacking Co.

DYES

Ayrton and Saunders
Crawshaw, E., and Co.

EAU DE COLOGNE

Farina, J. M. (Gegenüber)

ELECTRIC APPAR

Darton, F., and Co.
Orme and Co.
Colthurst & Harding (Electr)
Light Oil)

EMBROCATION

Elliman, Sons and Co.

ENEMAS

Ingram and Son
Lynch and Co.

ENGRAVERS

Barker, W., and Son

ESSENCES, FRUIT

AND SOLUBLES

Brady and Hinchliffe
Burgoyne, Burdidge and Co.
Bush, W. J., and Co.
Carter, H. W., and Co.
Hay's Soluble Lemon, &c.
May and Baker
Meadowcroft, W.
Stevenson and Howell
Thompson, H. A., and Son
Tyke and King
Vigt, G.
Woolley, Sons and Co.

ESSENTIAL OILS

Bernstein and Voght
Bush, W. J. (Lemons, &c.)
Cocking (Japan Peppermint)
Fulton (Eucalyptus)
Hay, W.
Lambert, S., and Co.
May and Baker
Meadowcroft, W.
Rocke, Tompsett (Eucalyptus)
Sumner and Co.
Sullivan and Fulton
Vimes (Oil Lavender)
Voght, G.
Warwick Brothers
Wright, Layman and Umney

ETHER

Duncan, Flockhart and Co.
Chloric
Howards and Son
May and Baker
Robbins

EXTRACT, MEAT

Brand and Co.
Burgoyne, Burdidge and Co.
(Dr. Koch's)
Coleman & Co.
Edgemoor, Lim.
Lodge Co.
Masco, Geo., and Co. (Lim.)
Pothe's Lenox Rosenthal,
R. chards, J. M. (Delacere)

EXTRACTS, FLUID INK

Barber, G., and Co.
Burgoyne, Burdidge
Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Heaton, Squire and Francis
Potter and Clarke
Thompson, H. A., and Son

FACE POWDERS

Chubb, J., and Co (Violet)
Foulkes

FEEDING BOTTS.

Bourne, Johnson and Latimer
Hearn, Rigell and Co.
Kilner Bros.
Lang, J. and J.
Maw, Son and Thomson
May Roberts
Thompson, Millard
Toogood, W.

FILTERING

Doulton and Co.
Dunlop, Mitchell and Co.
Maiguen (Filtre Rapide)
Mawson Swan, and Weddell
Slack & Brownlow
Sillicated Grn Filt. Co.

FOAMPRODUCERS

Bush, W. J. and Co.

FOOD, INFANTS

AND INVALIDS

Allen and Hanbury
Burroughs, Wellcome (Pepton-
ising)
Edge Bros., Lim. (Ess. of beef)
Goodall, Backhouse and Co.
Heaton, Squire (Malted)
King, Fredk., and Co. (Soups)
Lazenby, E., and Son
Mason, Geo., and Co. (Lim.)
Nestle, H.
Savory and Moore (Pancreatic)
Southall Bros. and Barclay
Van Abbott (Diabetic)

FORMULE

Brooks, T.
Robinson, G.

FULLER'S BARTH

Clubb, J., and Co.
Hynam, J.
Mumford, G. S.
Rouse and Co.

FUNNELS

Lynch's (New Registered)

GINGER ALB

Bingley, J.
Harston and Co.
Hay, W.
Kimmond
Meadowcroft, W. (Essence of)
Mills, H. and Co.
Roses and Co.
Schweppe (Dry)
Sumner, R., and Co.

GLYCERINE

Fink
Martindale, W. (Nitro-Glyce-
rine Tablets)

GRANULAR PREP.

Bates and Co.
Bush, W. J., and Co.
Evans, Sons
Wright, Layman and Umney

GUMS

Fink (Arabic, &c.)

GUTTAPERCHA

Duncan, Flockhart
Stevens, F. A. (White)

HAIR PREP.

Bates, T. W. (Frisette)
Capper, W. B. (Crimdione)
Cheesebrough Mfg. Co.
James and Co.
Morphy, E. (Walnut Pomade)
Rimmel
Towle Toilet Cream (Thorn-
ton's)

HARNESS COMPO.

Jamieson and Co.
New Military Blacking Co.
(Empress Gloss, &c.)

HERBALSITS

Butler, McCulloch and Co.
Coffin, A. I., and Co.
Deouzier, Henri
Newhall & Mason (Ext. of Herbs)
Peck and Veleor
Potter and Clarke

HOMOEOPATHIC

Bristol and W. of England
Capps, James, and Co.
Gould, E., and Son
Keene and Ashwell
Leath and Ross
Thompson and Capper

HOP ALE

Hay, W.

HOSPITALS

London Homoeopathic

HYPHOPHOSPHITES

Dunn and Co.
Fletcher, Fletcher and Steven-
son
Tykpe and King
Westman, F. J.

INHALERS

Evans, Sons and Co.
Maw, S., Son and Thompson
Toogood, W.

[See MARKING.]

Antoine
Bewley and Draper
Duncan, Flockhart
Jamieson Bros.

INSECTICIDES

Sandford
Steiner and Co.
Sumner, R., and Co.

KETCHUP

Tyler, P.
LANOLINE
Burroughs, Wellcome and Co.

LARD

Ewen, J.

LEATHER

Shaw, Alexander and John

LEECHES

Potter and Clark

LICORICE

Maud (Compound)

LIME JUICE

Feltoe and Sons (Specialité)
Idris and Co.
Montserrat (see Evans)

LINSEED

Kemp, W., and Sons (Crushed)
Mumford

LINT

Gibbs, Cuxon and Co.
Livesey, J. A., and Son
Maw, Son and Co. (Taylor's)
Newsome (Surgic's)
Robinson and Sons
Seabury and Johnson

LOZENGES

Allen and Hanbury
Blyton, Bage & Co. (Medicated)
Craven, J. A., and Son
Gibson, R. (Manufacturer)
Lynch and Co.
Mason, Geo., and Co. (Meat)
Randall and Son
Raines and Co. (Rose)
Sacker, W. E. ("The Marie
Warrior")
Razick Brothers

MACHINERY

Bracher and Co.
Carter, J. H.
Foster, F. (Compressed Tablet
Sherwin
Werner and Pfeiderer

MAGNESIA

Bates and Co. (Citrate)
Bishop, A.
Dinnerford (Fluid)
Henry, T., and H. (Calcined)
Murray, Sir James (Limon)

MALT EXT., ETC.

Allen and Hanbury
Burroughs, Wellcome and Co.
("Kepler")
Drysdaie and Co. (Dry)
Pothe's (Dr. Link's)

MARKING INES

Barber, G., and Co. (Crimson)
Christian, J.
Hooper, W., and Co.
Murphy, J.

MEDICINE CHSTS

Day, Son and Hewitt (Veterin.)
Day and Sons

MENTHOL

A. J. Menthol Depot, J. G.
Shirley, Proprietor
Ayrton and Saunders (Cones)
Boehm, J. (Charmes)
Cocking and Co.
Dundas, Dick and Co.
Gibbs, Cuxon and Co.
Metz, P. ("Acme")
Newbery and Son
Shirley
Spies Bros.
Sykes and Co.

MERCURIALS

Bush, W. J., and Co.
Howards and Sons
May and Baker

METHYLATED

SPIRITS

Burroughs, J.
Gibb, Smith and Co.
Harvey, J., and W., and Co.
Phillips, G., and Co.

METHYLENE

Robbins, J., and Co.

MICROSCOPES

Darton, F., and Co.

Perken, Son and Rayment

MIKING

MACHINERY

Bracher and Co.
Carter, J. H.
Follows and Bate
Sherwin, G. E.
Werner and Pfeiderer

MORPHIA

Macfarlan H. and Co.
Smith, T. and H.
Wink, J. A., and Co.

MUSE

Symes and Co. (Thibet)

MUSTARD

Finch, Rickman
Johnson, J. H. and S. (Ess. Oil)

NIGHT LIGHTS,

FAIRY LAMPS, &c.

Clarke, S.

OILS, PAINTS, &c.

Allen, J.
Binghamton Oil Refining Co.
Colthurst and Harding
Cranstone, W. H. (Paint Mills)
Depouzier, Henri
Elvin Bros.
Follows and Bate (Mill)
Peace, J. R., and Co.
Seddon, J. and T.

OINTMENT BASES

Binghamton Oil Refining Co.
Burroughs, Wellcome & Co.
(Lanoline)
Cheesebrough (Vaseline)
De Pass, E. A., & Co. (Petrolina)
Grindley (Petroleum Jelly)
Herrings and Co.
Metcalfe, Theo., & Co.
Saunders, C.

OXYGEN (Pure).

Bain's Oxygen Co. (Lim.)

PAINTS [See OILS.]**PAPAIN**

Kühn, B. (Papain-Finkler)

PAPER (Sanitary)

Ayrton and Saunders (Curl and
Toilet)
Bourne, Johnson and Latimer
(Japanese)

PARALDEHYDE

Zimmermann, A. and M.

PATENT AGENTS

Horn and Son
Trade Marks Protection Ass.

PATENT MEDCNS

Atkinson (Infant Preserv)
Barclay and Sons (General)
Barclay and Sons (Zymol)
Bates (Breast Salve)
Beeschem (Pills)
Bennette (Manna Cake)
Bray's Pills
British College (Morrison's)
Burgess, E. (Lion Ointment)
Carter's Liver Pills
Crouch, F. B. (Wafers)
Edwards and Son
Evans, Lecher (Hawley's
Counter Adjuncts)
Feeney, T. (Powders)
George and Welch (Liver)
Hayman, A. (Balsam of
Horehound)
Hirst, Brooke, and Birst
Holloway (Pills and Oint.)
Hop Bitters
Horsford (Acid Phosphate)
Kay Bros.
Lancor (Phosphodine, &c.)
Lincoln (Clarke's Mix.)
Lynch and Co.
Maud, W. and R. (Worm
Cakes)
May, Roberts and Co.
Munday, J. (Injection Day)
Newbery and Sons
Raines (Composition Ess.)
Richards, J. M. (American, &c.)
Roberts (Korean Pills)
Sanger (Widow Welch, &c.)
St. Dalmas (Bronchial, &c.)
Stennouse Patent Med. Co.
Sumner H., and Co. (Angels'
Food)
Thompson, Millard and Co.
Toogood (Bells Anti-catharr)
Towle, E. (Penury Royal)
White, A. J., Lim. (Kaskine)

PENS

Gillott

PERSPINE, &c.

Burroughs, Wellcome
Fletcher, Fletcher and Steven-
son
Jensen, C. L.
Keene and Ashwell
Newbery (Angluvin)
Savory and Moore (Pancreatic)
Emulsion, Peptonised Milk)
Sellers, J.
Warner and Co. (Angluvin)
Zimmerman

PHOTOGRAPHIC

May and Baker
Perken, Son and Rayment

PILL MACHINES

Cocking, T. S.

PLASTERS

Gibbs, Cuxon and Co. (Mustard)
Mather, W.
St. Dalmas, A. De
Seabury and Johnson
The Pelig White Propri-
etary Co.

**PERFUMERY,
FANCY SOAPS.**

[See Eau de Cologne.]
Barclay and Sons
Boehm Gustav (Various)
Briedenbach and Co.
Chesebrough Manufacturing Co.
Crown Perfumery Co.
De Pass and Co. (Bach Blossom)
Durrant, Geo.
Ewen (Soaps)
Grossmith, J., Son and Co.
Hirst, Brooke and Hirst
Mann, C. A.
Maw, Son and Thompson
Maubert (Soaps, &c.)
Newbery
Osborne, Bauer and Chesebrough
Raines and Co. (Cachous)
Rimmel, E. (Specialities)
Rowland and Son (Various)
Sainsbury, S. (Lav. Water)
Sanger and Sons
Shaw, Alex. and John (Perfumery Caps)
Southall Bros. and Barclay
Warrick Brothers
West, T. (Oskell's Mosa)
Woolley, Sons and Co. (Powders)
Wright, W. V., and Co. (Soap, Coal Tar)

PEROL. OF HYDR.

Dunn and Co.
Robbins

PHARM. PREPS.

Allen and Hanburys
Barron, Squire and Co.
Battie and Co. (Bromidia)
Blyton, Baze, and Co.
Burgess, Willows, Francis
Burgoyne, Burdidges
Burroughs, Wellcome (Various)
Clay, Dod and Co.
Corbyn, Stacey (New Preps.)
Duncan, Flockhart
Evans, Sons and Co.
Fellows (Hypophosphites)
Fletcher (Liqu. for Syrups)
Heron, Squire and Francis
Hewlett and Sons
Hirst, Brooke and Hirst
Hooper, B., and Co.
Howards and Sons
Kay Bros.
Keith (Conc. Tinctures)
Martindale (Nitroglycerine)
Savory and Moore
Sellers, J.
Southall Bros.
Squire (Chemical Food, &c.)
Syms and Co.
Thompson, H. A., and Son
Walker, Troke
Wink, J. A., and Co.
Woolley, Sons
Wyleys (Various)

PILLS (Coated, &c.)

Allen and Hanburys (Schief-feins)
Beecham, Thomas
Hooper, Dr.
McKesson and Robbins (Ovoid-capsuled)
Morrison
Newbery
Robertson, J. (Machine)
Sanger, J. and Sons
Stenhouse (Rheum. and Gout)
Smith, W. F.
Towle (for Females)
Warner, W. R. (Coated)
Wyleys and Co.

PITCH

Peace, J. R., and Co.

PODOPHYLLIN, &c.

Keith, B. and Co.
Smith, T. and H.

POLISHING

Baumgartner (La Brillantine)
Bradley, Bourdas (Albatum)
Jamieson and Co.
New Military Blacking Co.,
J.M. (Metal)
Oakley, John, and Sons
Schulz, Fritz (Paste)

PORCELAIN GDS

Lynch (Lock-lid Covered Pots)
Poths, H., and Co.
Toogood (C.C. Pots, regist.)

PRINTING

Blake and Mc Kenzie
Bowers Bros.
Ford, Shapland and Co.
Silverlock, H.
Townsend, J. (Exeter)

**PYROGALLIC
ACID**

Bernstein & Vogt

QUININE SALTS

Drysdale, J. W., and Co.
Howards and Sons

Zimmermann

RENNET

Meyer and Henckel

RESPIRATORS

Bourne, Johnson and Co.
Evans and Co.
Frazer & Green "Factory."
Maw, S. Son and Thompson
Sanger, J., and Son

SALICINE

Macfarlan and Co.

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Lazenby (Harvey's)

**SCHOOLS OF
PHARMACY, &c.**

Edinburgh Classes
Liverpool School
London Homoeopathic
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The School of Pharmacy
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Chubb, J., and Co.

SELTZOGENES

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SHAVING

Howenden (Euxesia)
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Grindley

SHOP FITTERS

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Howlett, S.
Lemaître, W., and Co.
Lynch and Co.
Maw, Son and Thompson
Stefan, T., and Co.
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Chiswick Soap Co.

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Perken, Son and Rayment

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Edgell, Bros. (Pure)
Gibbs, Smith and Co.
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Phillips, G., and Co. (Pure)

SPONGE

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Cresswell Bros.
Peterson, M.
Schutze and Co.

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Pollard, A. W.

STARCH

Critchley (Gloss)
Harrop's Glaze
The Patent Barax

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Anstin and Co. (Sprinklers)
Barnett & Foster (The Eclipse)
Briedenbach and Co. (Pt. Lock)
Brooks, Peel (Sprinklers)
Lazenby, E., and Son (Barrett's Patent)
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Christy, T., and Co.

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Ingram and Son
Marks, A. A. (Artificial Limbs)
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Powell and Barstow (Elastic Gum)
Thompson, Millard and Co.
Woolley, Sons, and Co.

SYRUPS

Barnett and Foster

Lang, J. and J.

SYRUPS

Fletcher, Fletcher (Liquors)
Stevenson and Howell

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The Gt. Tower St. Tea Co.
Walker and Dalrymple

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James, R. J. (Billster)
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Evans, Sons and Mason
Hearon, Squire and Francis
Herrings and Co.
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Hirst, Brooke and Hirst
Oldfield, Fattinson and Co.
Potter and Clarke (American &c.)
Raines and Co.
Southall Bros. and Barclay
Stevenson and Howell
Summer, B., and Co.
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and Son
Thompson, Millard and Co.
Typke and King
Walker, Troke and Co.
Woolley, Jas., Sons and Co.
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Wyleys and Co.
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Ambrecht, Nelson and Co. (Coca
Vine)
Coleman and Co.
Durrant, G. (Orange)
Hirst, Brooke and Hirst
(Orange)
Ingram and Royle
Metcalfe, Theo., and Co. (Coca
Vine)
Robinson, B. (Orange)
Williamson, W. H. (Orange)

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The Best of Night Caps.

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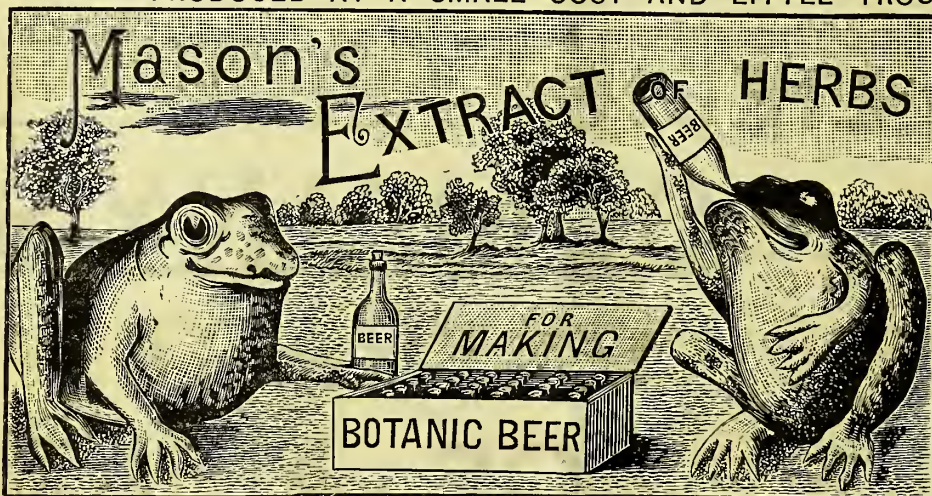
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This invaluable preparation is carefully compounded from the above-mentioned popular herbs, gathered when in full bloom, and contains all their well-known tonic, stomachic, and blood-enriching properties unimpaired. Notwithstanding many imitations, it stands unrivalled for the production of a most delicious, invigorating, and non-intoxicating beverage, which is not only cooling and refreshing in its nature, but being also a pure and healthy stimulant, is unquestionably the most wholesome and perfect substitute for intoxicating drinks ever discovered for either summer or winter use.

Sold in Bottles, 6d., 1s., 2s., 5s., & 20s. each. Prices, Circulars, Show Cards, &c., on application.

MASON'S | EXTRACT OF HERBS | (REGISTERED).

THE ORIGINAL PREPARATION.

Beware of imitations. Order MASON'S so as to get the Original.

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AERATED HOP ALE
made from this es-
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its peculiarly fine Hop
Flavour and Aroma.

"A beautiful es-
sence, has a fine Hop
Aroma, and is quite a
pharmaceutical triumph."

The Chemist and Druggist



REGISTERED.

HAY'S HOP ALE.

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Non-Alcoholic beverage.

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"Has the Hop Taste
of Bitter Beer, and is a
nearer approach to Bass's
or Allsopp's Ale than any
non-intoxicants preceding
it."

Eastern Morning News.

Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s.

Quantity required, two fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles.

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ENGLAND.**

W. MEADOWCROFT,

MANUFACTURER OF HIGHLY CONCENTRATED

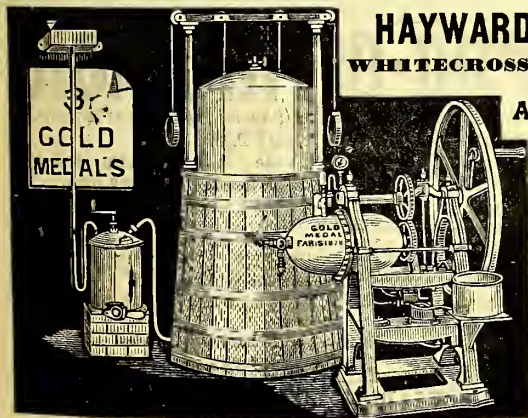
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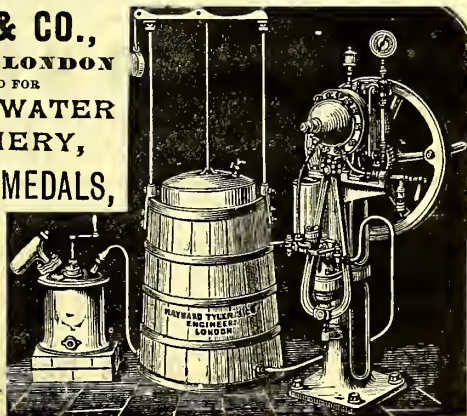
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PARIS,
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ONLY PRIZE MEDAL,



LONDON, 1881.

THE

CHEMISTS'

HIGHEST PRIZE MEDAL



BRADFORD, 1882.

AERATED & MINERAL WATERS ASSOCIATION, L^D.

THE Company was registered in 1878, and it is pleasing to note the gradual but ever increasing number of new Members who join year by year, naturally bringing increased trade and prosperity to the Association.

The following figures and facts will be interesting to the Members of the Association:—

Year.	No. of Members.	Dividend.
September 30th, 1878	119	None
" 1879	350	None
" 1880	430	None
" 1881	540	None
" 1882	615	3 ³ / ₄
" 1883	708	5
" 1884	908	6
" 1885	1,193	6
" 1886	1,463	6

The results of the Working for this period were as follows: 1879 being the first complete working year:—

	£	s.	d.
1879	Loss	260	13 8
1880	Profit	275	0 1
1881	"	729	5 3
1882	"	904	18 0
1883	"	1,307	2 10
1884	"	1,919	0 4
1885	"	1,844	10 7
1886	"	2,170	14 0

It may be thought that the year 1885 shows a falling-off in results, but that is not really the case, as in this year we tried the experiment of free delivery in London, which cost us about £600. We are now charging a small amount for delivery in town.

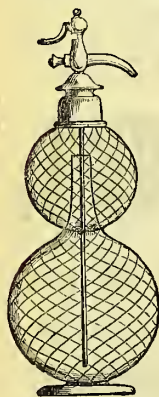
By referring to balance sheet for this year you will find that £488 16s. 7d. had to be deducted for Harrogate law expenses, otherwise the profit would have shown a much larger increase over that of 1885.

It is hardly necessary to dilate here on the really wonderful progress made by the Association, nor on the superior quality and excellence of the waters manufactured. A glance at our testimonials will show how thoroughly satisfied the Members are on all these points. We would, however, volunteer our opinion that the Association (notwithstanding that at the commencement it was very tardily supported by the trade) will year by year increase, and that eventually we shall have the general support of the Chemists of the United Kingdom.

LONDON.

HARROGATE.

BRISTOL.

DOWN AGAIN!!!FEVRE'S
SELTZOGENES.

	2 PINT.	3 PINT.	5 PINT.	8 PINT.
Caned, each	7/10	9/2	13/9	23/5
	2 PINT.	3 PINT.	5 PINT.	8 PINT.
Wired, each	7/5	8/9	13/	22/

£2 worth or more, 5 per cent. discount.

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Telegraphic Address—"FEEDING BOTTLES LONDON."

BY ROYAL LETTERS PATENT.

HASSALL & Co.'s PHOSPHO-CITRIC ACID

To Supersede Citric & Tartaric for Aerated Waters. It is recommended by the most eminent Physicians in Great Britain.

THE BEST HOUSES IN THE TRADE HAVE ALREADY ADOPTED IT.

It is thoroughly beneficial, and far better suited to the requirements of the Mineral Water Trade; it is free from lead and all other minerals and cheap acids; it is fully £8 per cwt. cheaper than Citric Acid, which mostly contains lead.

WE COMPLETE ON QUALITY AND PRICE.

Testimonial from Mr. A. J. MASON, Chemist, of Bexley Heath.

"Having gone carefully into the matter I have no hesitation in saying that the patentees have in no way overstated the merits of their acid. There is no doubt in my mind that Phospho-citric Acid produces a much higher class beverage-giving, as they say, 'greater body'—the one thing needful in this class of goods; also a fruity character and mellowness I have never been able to secure with the ordinary acids. The aroma is also more pronounced. 'Purity' was my great incentive to giving the acid a trial, but I found 98s. or 99s. (citric at 1s. 7d. per lb.) per cwt. an economy not often secured under such favourable circumstances."

Why pay 2/6 per lb. for Citric, when a purer and more efficient Acid can be bought at about $\frac{1}{3}$ the price?

Beware of Imitations.

Write for Pamphlet and Testimonials.

3-oz. Sample will be sent on receipt of Postage (3 Stamps), or 14 lbs. on approbation.

HASSALL & CO., Great Northern Goods Depot, King's Cross, LONDON.

Reuter's Cables and Inland Telegrams—"REMPUJARON LONDON."

NEW YORK—F. J. MACNAUGHTAN, 20 CEDAR STREET.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

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DRUGGIST OF AUSTRALASIA is included.

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ADVERTISEMENTS of employers and assistants can now be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

CORRESPONDENTS will please note that our registered telegraphic address is changed from "Chemdrug, London," to "Chemicus, London," the Post-office authorities having informed us that they found the former word inconvenient.

DIARY FOR NEXT WEEK.

Tuesday, January 11.

Public sale of cocoa butter, at the Commercial Sale Rooms, Mincing Lane, at noon.

Public sale of isinglass, at the Commercial Sale Rooms, Mincing Lane, at noon.

Public sale of drysalteries, at the Commercial Sale Rooms, Mincing Lane, at 1 P.M.

Wednesday, January 12.

Public sale of spices, at the Commercial Sale Rooms, Mincing Lane, at noon.

Royal Microscopical Society, King's College, W.C., at 8.

The following papers will be read:—(1) Mr. A. W. Bennett, on "Fresh-water Algae (including Chlorophyceous Protophyta) of North Cornwall; with descriptions of six new species." (2) Mr. J. Mayall, jun., "A Visit to Jena."

Thursday, January 13.

Public sale of drugs, at the New Corn Exchange, Mark Lane, at 10.30 A.M.

REGULATIONS AFFECTING THE DRAWBACK ALLOWED ON EXPORTS FROM GERMANY OF PREPARATIONS CONTAINING SPIRITS.

THE following by-laws are at present in force as decreed by the Federal Council of Germany:—

Drawback granted to manufacturers only. The drawback on perfumed spirits of home origin (eau de Cologne and the like preparations) can only be claimed by, and is not to be granted except to, manufacturers proper, employing exclusively German spirits of dutiable origin for their products, and may be revoked at any time.

Consignments in wood. On consignments in wood this drawback is granted subject to the general export bounty regulations in force for ordinary spirit, &c.

Declaration regarding origin. If exported in flasks or bottles the bill of clearance must contain an express declaration to the effect that the preparation is made up exclusively of spirits produced within the limits of the Federal Customs Union.

Minimum consignments passed. The minimum quantity passed under this head is 68·7 litres* (= 120·912 English pints) in one clearance, and at one and the same time, subject to the further condition that such minimum consignments contain only even-sized flasks or bottles of the same capacity, which latter is ascertained by way of tests on the part of the customs authorities.

Mode of calculating strength. As a rule the export bounty is granted on the assumption of a strength of 50 per cent. of pure alcohol, provided the bill of clearance embody a declaration warranting the preparation to contain no weaker minimum percentage thereof, and that a test in point—which the customs' staff are at liberty to take—do not prove it to be weaker.

Actual percentage of alcohol admitted. Should the exporting manufacturer prefer to obtain his drawback upon the actual percentage of alcohol, whatever it may be, he has to present a special declaration to that effect, whereon the real strength will be ascertained by way of repeated tests.

Manufacture in bond of preparations containing spirits, there are no legal provisions for this mode of procedure in Germany. Hence such manufacture is not feasible in that country.

The present rate of drawback on perfumed preparations containing spirit—whether exported in flasks and bottles or in wood—is 8M. 0·58Pf. per 5,000 litre per cent. (say 8s. 0·7d. sterling per hectolitre of 50 per cent. alcohol according to Tralles).

NOTE—The preceding data refer to the States forming the so-called Spirit Excise Convention of Germany. Apart from this the export bounty rates on ordinary distilled spirits differ as under in the following States:—

Name of State	Rate of Drawback allowed	On a quantity of	Minimum passed in one clearance
Hohenzollern Lands	Marks 1·50	1 hectolitre of any strength up to 65 per cent. Tralles	30 litres
Ditto	3·00	1 hectolitre of any strength above 65 per cent. Tralles	
Bavaria (distilled spirit)	8·00	1 hectolitre of 50 per cent. Tralles and 12 ¹ / ₂ Réaumur	50 litres of a minimum strength of 35 per cent. Tralles
Ditto (liquors containing sugar)	4·80	1 hectolitre of any strength whatsoever	50 litres
Baden (distilled spirits)	0·12	1 litre pure alcohol = 100 litre per cent., the actual strength found being calculated accordingly	50 litres of a minimum strength of 35 per cent. Tralles
Ditto (liquors, &c.)	0·80	1 litre irrespective of strength	50 litres

Württemberg grants no export bounty on distilled spirits and liquors.

* Taking 1 litre at 1·76 English pints.

Metropolitan Reports.

THE LOST HORSE.—Messrs. Idris & Co., of Kentish Town, have recently recovered in the Court of Queen's Bench 15*l.* as the value of a horse which they had sent to grass with a farmer at Tottenham, and which had strayed away, as they alleged, in consequence of the defendant's land not being properly fenced.

SURGICAL AID.—The report of a Committee appointed by the delegates of the Hospital Saturday Fund shows that during the year ending November last assistance in the shape of expensive surgical appliances had been given to 632 cases at a cost of 300*l.*, a third of which was contributed by the patients. The appliances were supplied by Messrs. S. Maw, Son & Thompson, and by Messrs. Masters & Co., New Kent Road, the contractors.

FIRE.—Last week a fire broke out in a woollen merchant's warehouse at 82 Jewry Street, which extended to the property of Messrs. H. Poths & Co., druggists' sundriesmen. The fire was got under before much damage was done, and business has not been interrupted.

SUICIDE BY NITRIC ACID.—Last week Dr. Danford Thomas held an inquest touching the death of Alfred Hunt, aged 53, a bath chairman, who on Christmas days swallowed a quantity of nitric acid, from the effects of which he died in great agony on the Monday following. Dr. Waller stated that the deceased had taken nitric acid mixed with milk, and had told him (witness) that he had taken it intentionally. The jury returned a verdict in accordance with the evidence.

INCORRECT DISPENSING.—A CHEMIST FINED.—At the Westminster Police Court on Monday, Mr. William Ashton, of 36 Sloane Square, Chelsea, pharmaceutical chemist, appeared before Mr. Partridge, in answer to a summons at the instance of the Vestry of Chelsea, charging him with selling a compounded drug—namely, iodide of potassium solution—not in accordance with the prescription of the purchaser, the inspector under the Food and Drugs Act. A second summons was for the offence of selling a drug not of the nature, quality, and substance demanded. The inspector employed by the Vestry said that the medical officer of the parish, Dr. Seaton, who was also the appointed analyst, had found that there was considerable carelessness in making up prescriptions at chemists' and other drug shops, and by his direction a prescription for a mixture of 90 grains of iodide of potassium and 6 oz. of water was left with the defendant to make up. The analysis showed that there were only 71 grains of the drug used in the preparation, or 19 grains short of the quantity prescribed. The defendant stated in evidence that technically he was not in a position to question the accuracy of the analyst's certificate; but such a slight deficiency might easily be due to an accident, such as the dropping of a crystal outside instead of inside the bottle. He also maintained that the difference between the quantity named in the prescription and the quantity found in the mixture would not in this instance be productive of material consequences. The effect would be practically the same. He was quite unconscious that any inaccuracy occurred in making up the prescription. Mr. Partridge thought it was of the utmost importance that doctors' prescriptions should be dispensed with absolute accuracy, and fined the defendant 20*s.* and 4*s.* costs. The penalty was paid.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

THEY LOOKED AGAIN AND FOUND IT.—Mr. Charles Mantell, of Cregoe Street, Birmingham, has had a curious experience. He sells a digestive tincture which is unquestionably

liable to medicine-stamp duty. Recently he had the following letter from Somerset House:—

Solicitor's Department, Somerset House,
London, W.C.

SIR,—I have to acquaint you that an information has been lodged at this office for the purpose of a prosecution being commenced against you, in the Queen's Bench Division of the High Court of Justice, for the recovery of the penalty of 10*l.* incurred by you in respect to the offence against this revenue, particulars of which are specified on the other side.

I am, sir, your obedient servant,

W. H. MELVILL.

PARTICULARS OF OFFENCE: Selling on November 27 an article called "Mantell's Digestive Tincture," chargeable with the medicine-stamp duty, without having a stamp thereto affixed.

To this Mr. Mantell replied as follows:—

DEAR SIR,—In reply to yours of December 4, stating that an information had been lodged for the purpose of a prosecution being commenced in the Queen's Bench Division of the High Court of Justice for the recovery of the penalty of 10*l.*, for the sale of Mantell's Digestive Tincture, alleged to have been sold without having a stamp thereto affixed. I beg to state that no bottle of the Tincture is sold without having a stamp duly affixed, and on the bottle in question the stamp will be found underneath my printed band over the cork, and as the contents of the bottle cannot be taken from it without destroying the stamp, the obvious intention of the law is in both respects fulfilled. In conclusion, I may state that, as this threat of proceedings is due to official oversight, it is a matter which calls for an official apology.

I am, dear sir, &c.

W. H. Melvill, Esq.

In reply, a courteous letter was received from the solicitor, with an expression of regret for the inconvenience caused, and stating that on an examination of the bottle the stamp was found.

The twenty-seventh annual meeting of the governors and subscribers of the Birmingham Dental Hospital was held on Monday, January 3, when it was announced that the founder of the hospital (Mr. Adams Parker) had presented to the hospital his collection of dental specimens, &c., with the hope that it might be the means of establishing a museum worthy of the institution. During the past year 10,704 patients had attended, and upon these 10,037 operations had been performed.

AUXILIARY TRADES.—A chemist in this town who took the initiative from an article published in one of your annual Daries, joined with his own business the profession of a dentist, and during the year just closed informs me that he has successfully performed upwards of one thousand operations, as well as supplying requisites for the teeth and gums in conjunction therewith.

SUICIDE THROUGH BEING OUT OF WORK.—William Jeffreys, commercial clerk, 53 years of age, poisoned himself with prussic acid on Friday last. He had been out of a situation for some time, and his inability to get work greatly depressed his spirits. The evidence went to show insanity. It was evident that the bottle of prussic acid had been in his possession for a long time, but owing to the distressed state of his wife at the inquest no details of its purchase were obtained.

THE SIXTEENTH ANNUAL BALL of the Midland Counties' Chemists' Association is to be held at the Birmingham Town Hall on Thursday, January 20. Last year, we are told, many friends were unable to gain admission owing to all the tickets being sold a week beforehand. It is absolutely necessary for those who wish to be present to obtain their tickets early next week.

BRIERLEY HILL.

TINCTURE OF QUININE.—At the Police Court on December 23, before Mr. Neville, Stipendiary, Joseph Bloomer, proprietor of the Stores, High Street, was prosecuted under the Sale of Food and Drugs Act for selling tincture of quinine alleged to be not of the nature and quality de-

manded. Mr. J. E. Morris, inspector, was the prosecutor, and Mr. W. Waldron defended. A shilling's-worth of tincture of quinine was purchased, and, according to the report by Mr. E. W. T. Jones, the county analyst, it contained 7.09 grains of sulphate of quinine per oz., instead of 8 grains, as prescribed by the Pharmacopœia. The boy who purchased the tincture denied in cross-examination that he was told that it would have to be heated or to stand for three days. In defence Mr. Waldron said the tincture sold was prepared with sulphate of quinine, according to the Pharmacopœia of 1867, instead of with hydrochlorate as directed in the Pharmacopœia of 1885. In the former case there was a larger deposit. Mr. Henry William Jones, analytical chemist in the employ of Messrs. Wyleys & Co., analytical and operative chemists, of Coventry, was called on behalf of the defendant, and his certificate of analysis showed that the tincture which had been prepared according to the British Pharmacopœia of 1867 contained 7.65 grains of sulphate of quinine or its equivalent. In his opinion this sample fell within reasonable limits. George S. Bowe, assistant to defendant, said he told the boy that they did not keep the article in stock, but that if he was in particular want of it, he would prepare him some. He further told him that it would want shaking and keeping in a warm place for three days. He asked the boy if he would take it in that way, and he replied "Yes." Witness prepared 2 oz. of the tincture according to the Pharmacopœia of 1867, and put in 8 grains of sulphate of quinine to the ounce. He used every precaution, and would swear he made no mistake. The reason he did not use the new Pharmacopœia was because defendant had taken it away with him to look at something. His Worship, having summed up, imposed a fine of 20s. and costs.

CHELTENHAM.

ALLEGED CARELESS DISPENSING.—An inquest on the body of the infant child of Mr. F. C. Dodwell, who is alleged to have died from the effects of opium-poisoning, was resumed on Monday before Mr. E. W. Coren, coroner. The evidence was to the effect that the child, who was suffering from croup, was attended by Mr. Dighton, surgeon, who prescribed, among other remedies, four powders of ipecacuanha. The powders were procured from Mr. Hands, chemist, and duly administered, and the child appeared to be going on well when the doctor again saw it, and prescribed an additional seven powders of ipecacuanha. For these powders the father of the child went to the County Drug Stores, High Street, and was supplied by an assistant. On returning with them he gave one to the child, who almost immediately afterwards showed symptoms of opium-poisoning, and died on the following night—twenty-one hours after taking the powder. Three other powders and emetics (provided by the doctor) were used after the symptoms of poisoning showed themselves, but to no purpose. The doctor gave it as his opinion that the seven powders supplied by the Drug Company were "pulv. ipecac. co.," which contained opium among other ingredients. Mr. Embrey, county analyst, stated that the five powders submitted to him (part of the number supplied by the Drug Stores) weighed altogether 61 grains, and he found that they were composed of potassium sulphate 77.5 per cent., and organic matter 22.5 per cent. The latter consisted of opium and ipecacuanha in equal proportions. He had also made an analysis of the contents of the stomach, in which he had found traces of opium and potassium sulphate. The inquest was again adjourned till Monday next.

HORNCastle.

MESSRS. W. KEMP & SON'S Household and Farm Almanack for 1887 has just been issued. It is a popular publication in the district. Besides the almanack and diary it contains a good deal of miscellaneous reading, including some useful advice concerning simple ailments, cooking receipts, farm memoranda, &c. There is also a humorous article recording the "Annual Meeting of the Medicine Guild" on Christmas Day. It narrates the after-dinner speeches of the various medicinal specialties of the firm. Mr. Cough Cordial occupied the chair, and proposed a resolution, which was ultimately carried unanimously, "that any member of the Guild who fails to relieve or cure when taken according to directions shall be expelled from amongst us." Mr. Antibilious Pill, in

supporting the resolution, said he agreed with Mr. Bright that "Force is no remedy." He accomplished his mission by firm but gentle persuasion. Physic Ball was a little disposed to rebel against these maxims, but Quinine Wine raised the first actual discord by urging that if his merits were more generally recognised there would not be so much need for the services of the other gentlemen. Relief Drops narrated how on one occasion being sent out with American Plaster to a terrible case of pain, "Now," said Relief Drops to his colleague, "you take the back, and I'll take the body;" and between them they stopped the pain almost immediately. But American Plaster was very conscientious, and refused to let go until he was quite sure that he had made a cure, insisting that he had his reputation to keep up. Baking Powder caused great uproar by declaring that his object was to prevent illness by providing digestive food. He was urged by the president not to obtrude his principles so as to injure the interests of other members of the Guild. The "Veterinary Chaps," old Horse Powder, and his mates, Colic Drink and Grease Ball, had a little say before the meeting closed.

HULL.

THE ALLEGED FRAUD BY A DRUGGIST.—The case against Mr. Welburn Shepherdson is proceeding; last week he was again brought up on remand. The evidence then given went to show that when Mr. Shepherdson borrowed 100*l.* from Mr. Carlin, the prosecutor, he had not one penny in the Newington Land Society, whose pass-book he handed to Mr. Carlin as security, having been allowed to retain it as a receipt for the amounts he had paid in. Defendant was now committed to the Borough Sessions for trial.

KIDDERMINSTER.

OFFENSIVE SMELLS.—Mr. T. Lea, M.P., recently instituted proceedings in the High Court of Chancery, in order to obtain an interim injunction restraining Messrs. B. Hepworth & Co. from carrying on chemical works near to plaintiff's residence, on account of the alleged nuisance caused by offensive smells from the defendants' works. Evidence was heard for both sides, and Mr. Justice Chitty, in giving a verdict for the defendants, stated that it had not been proved that they commenced the operations which gave rise to the smells until October 6, and that the nuisance from the guano works was stopped on November 27. An inspection of the works had been made by Mr. Bostock Hill and others. He certainly smelt the effluvia of ammoniacal or gas liquor, but that was at a distance of seventy yards. The distance from the works to plaintiff's house was 500 yards, and to the nearest part of the garden 250 yards. He held that the other evidence maintained defendants' position, and he thought that the case was not a clear one; but on the balance of the testimony, and on the balance of convenience, and seeing what a serious thing it was to put a defendant who was carrying on operations of that kind under an injunction, and that there were some difficulties in the evidence on the part of the plaintiff, he thought it was just on the whole not to grant an injunction.

LEICESTER.

CHRISTMAS CHEER.—As an evidence of the amount of preparation made for the Christmas festivities, we are told that a firm of chemists in this town sold in the month of December, previous to Christmas Day, nearly 5½ cwt. of baking-powder, sufficient to make 60 sacks of flour, of 20 stones each, into plum cake.

LIVERPOOL.

CARBOLIC ACID POISONING.—On Tuesday last an inquest was held before Mr. Clarke Aspinall, coroner, on the body of William Thomas Miller, seventeen years of age. Deceased was very much given to reading, especially of "penny dreadfuls." Two weeks since a brother of the deceased was buried, and since then he had been very strange, and was constantly repeating the words, "The flower of the flock's gone now; I won't be long after him." He had been very fond of the child. On

Saturday morning the deceased went to bed soon after twelve o'clock, and shortly afterwards he was discovered in a fit. There was a smell of carbolic acid in the room, and a bottle which had contained that acid was found. A doctor stated that the acid was the cause of death, and a verdict was returned accordingly.

THROWING CARBOLIC POWDER.—A young woman of seventeen was charged in the Bootle Police Court, on Tuesday, with having thrown some carbolic powder in the face of another woman. The powder burnt the right eyelid, and she was taken to the Bootle Borough Hospital, the authorities of which were unable to tell whether the sight of the eye could be preserved. The bench remanded the case for a week.

THE "PETRIANA" EXPLOSION.—At the resumed inquest held on Wednesday, December 29, at the Queen's Hotel, Birkenhead, on the bodies of the six men who were killed by the explosion of petroleum gas on the steamship *Petriana*, Mr. Norman Tate, analytical chemist, of Liverpool, acted as foreman of the jury. Another of the injured men has since died, making the total number who have lost their lives by the explosion seven.

NEWCASTLE-ON-TYNE.

MYSTERIOUS DEATH.—In Christmas week a man (supposed to be a chemist's assistant named Darrell) took lodgings for a night at 23 Nelson Street, and next day, as the landlady failed to get into his room, a policeman was called who forced the bed-room door open. He found the body of the man lying in bed dead; an empty medicine bottle, and a glass jug containing water, were standing on a chair beside the bed.

SHEFFIELD.

THE RECENT PROSECUTIONS have called forth an animated correspondence in the local papers, in which the magistrate's decision has been severely commented upon. Pharmacists who have opposed that decision have had the best of it in the discussion.

THE DANGERS OF LINIMENTS.—An inquest was held on December 31 at the Bull's Head tavern, Whittington, on the body of John Meakin, who had died from the effects of poison. From the evidence it appeared that deceased was addicted to drink, and had swallowed some liniment. Dr. A. M. Palmer deposed that the deceased consulted him concerning a pain in his shoulder. Witness gave him a 3-oz. bottle containing 1 oz. belladonna and 2 oz. soap liniment, labelled "poison." When the man saw witness labelling the bottle he said jocularly, "I suppose if I took it it might do me some good." He was afterwards called to see Meakin, and found him in a state of stupor. The jaws were so firmly set that witness had to remove a tooth before he could use the stomach-pump. He was surprised that such a strong man should be killed by so small a dose. Another witness stated that he had rubbed deceased's shoulder with the liniment, and had used about a third of it. The jury returned a verdict that "Deceased died from the effects of poison taken by himself whilst suffering from drink."

KILLED BY A JUJUBE.—A child named Byron Watson, a year and ten months old, has died here from suffocation caused by swallowing a jujube which was given him with other sweets. His parents being unable to dislodge the jujube from his throat took him to a medical man, in whose surgery he died. An inquest has been held, and a verdict of "Accidental death" was returned.

STOPPAGE IN GLASS-BOTTLE TRADE.—Local chemists are likely to be affected more or less directly by the disturbance in this industry, which occupies a prominent position in South and West Yorkshire. A week's notice to cease work has been given at most of the leading works, and though a conference of masters and men has been held, it is feared that negotiations will prove of no avail.

SOUTHSEA.

PILLS AND POETRY.—We mentioned some time since that Mr. Fletcher had offered prizes for verses on his pills, following, perhaps, the idea suggested by one of our Post Card Competitions. He had over 700 responses, but he could not have tapped a very rich vein of poetic talent if the following

verses which he publishes in a local paper are anything like the best:—

Here's good advice
For people ill,
For low in price
Is Fletcher's Pill.

If you've the gout
Shun doctors' bills,
Without a doubt
Take Fletcher's Pills.

If you're beset
With any ills
Through cold or wet,
Take Fletcher's Pills.

STROUD.

POISONED BY LAUDANUM.—An inquest on the body of William Champney was held last week at the police station by Mr. A. J. M. Ball, coroner. From the evidence it appeared that deceased had threatened to poison himself. Evidence was given as to the purchase of laudanum, and Mr. Wethered, surgeon, stated that there was no doubt that death resulted from laudanum poisoning. The jury returned a verdict accordingly.

SWANSEA.

THE MAN WE WANT.—The *South Wales News*, published at Cardiff, has the following:—"Well, they are confiding people at Swansea. A man quietly walks into a chemist's shop, tells the proprietor that he is the captain of a vessel, and immediately asks for a loan of a sovereign. The strange part of the story is that he succeeded in borrowing half a sovereign, and took the rest out, not in medicine, but in some of the various articles which are kept by the tradesman in question. Mr. Yorath, you have not sufficient scope for your philanthropy at Swansea. You come to Cardiff. Most of us will be happy to borrow much more than that, and relieve you of all your stock-in-trade at the same price. Let me proffer my advice. Don't any longer waste your sweetness on the desert air. Cardiff is the place for a person of originality and enterprise, though the climate may prove relaxing."

WIDNES.

ACCIDENT IN CHEMICAL WORKS.—On Thursday of last week a workman at Messrs. Gaskell, Deacon & Co.'s works, while wheeling a barrow, missed his footing, and fell into a liquor tank, severely burning himself.

SCOTLAND.

EDINBURGH.

PHARMACEUTICAL SOCIETY, NORTH BRITISH BRANCH.—For the seventeen members of executive required to manage, under the new arrangement, the affairs of the Society in Scotland twenty-nine persons have been nominated and are willing to act if elected. Voting-papers have been issued, and a meeting of the members and associates in business in Scotland has been convened to be held on Wednesday, January 12, at noon, to receive the result of the election. The following are the names on the voting-papers:—

1. Ainslie, William, 58 George Street, Edinburgh.
2. Boa, Peter, 119 George Street, Edinburgh.
3. Clark, William Inglis, 104 South Canongate, Edinburgh.
4. Coates, Edwin, 21 Duke Street, Edinburgh.
5. Duncan, William, 13 East Princes Street, Rothesay.
6. Fairgrieve, Thomas, 45 Clerk Street, Edinburgh.
7. Fisher, John Hutchison, 66 High Street, Dunfermline.
8. Fraser, Jonathan Innes, 13 Dundas Street, Edinburgh.
9. Frazer, Daniel, 127 Buchanan Street, Glasgow.
10. Gibson, Adam, Leven, Fife.
11. Gilmour, William, 11 Elm Row, Edinburgh.
12. Hendry, Robert Love, 27A Earl Grey Street, Edinburgh.
13. Henry, Claude Francis, 1 Brandon Terrace, Edinburgh.
14. Hardie, James Miller, 68 High Street, Dundee.
15. Kermath, William Ramsay, 78 Market Street, St. Andrews.
16. Kinninmont, Alexander, 69 South Portland Street, Glasgow.
17. Laird, George Hardie, 40 Queensferry Street, Edinburgh.
18. Mabon, Thomas, 5 Oliver Place, Hawick.
19. Mackay, George Duncan, Canning Street, Edinburgh.
20. Mackenzie, James, 45 Forrest Road, Edinburgh.

21. Nesbit, John, 162 High Street, Portobello.
22. Noble, Alexander, 139 Princes Street, Edinburgh.
23. Paterson, James, 133 Gallowgate, Aberdeen.
24. Pinkerton, William, 17 Greenside Place, Edinburgh.
25. Robertson, William, 94 High Street, Elgin.
26. Storie, Robert, 94 High Street, Dalkeith.
27. Storrar, David, 228 High Street, Kirkcaldy.
28. Strachan, Alexander, 138 Rosemount Place, Aberdeen.
29. Watt, James, sen., High Street, Haddington.

THE PRICE QUESTION has entered upon a new phase in Edinburgh with the advent of the year. After a period of passive resistance, during which a few individual firms entered into competition with the "cutting" establishments, it was finally resolved to come to close quarters with the interlopers and fight them with their own weapons. This was felt to be more especially necessary in the matter of patent medicines, the difference in the prices of which was a powerful argument in inducing the public to believe the whole of the implied representations of the outsiders, and confirm the popular delusion of the enormous profits of the drug trade. In accordance with this resolution the following advertisement was inserted in the local newspapers on Monday, January 3:—

"Important notice.—Cash prices.—The principal chemists and druggists of Edinburgh and Leith respectfully inform the public that on and after Monday, January 3, 1887, they will sell patent medicines and proprietary articles at wholesale prices for cash only."

Edinburgh, as regards chemists, has been among the last of the large towns to adopt the now almost general practice of selling these articles at wholesale prices for cash payments. Since the appearance of the above announcement the proprietors of a "drug store" in town, which has been endeavouring to cultivate a business by "cutting" prices, very amusingly "tender their thanks for the support given them by the public in exposing the big profits taken by the Edinburgh and Leith chemists and druggists."

THE EDINBURGH CHEMISTS' BALL comes off on January 14, and the number of tickets sold promises well for a successful gathering. The Assembly Rooms, George Street, have this year been secured for the ball. These are the best rooms in the city.

POISONING WITH BICHROMATE OF POTASH.—On Tuesday morning, Andrew Hendry, timekeeper at Coltness Ironworks, Newmains, died under singular circumstances. Before resuming work after breakfast on Monday, he drank by mistake a small quantity of solution of bichromate of potash, which he was in the habit of using in his practice as an amateur photographer. After discovering his mistake he tried remedies to reduce the effects of the poison, and went about his work as usual without informing anyone of the occurrence until the afternoon, when, in answer to the inquiries of his wife, he replied "I am poisoned." He gradually got worse, and Dr. Miller, being called in, prescribed emetics, but without avail. Deceased was forty-nine years of age, and a man above the average intelligence of the ordinary workman.

EDINBURGH CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The last meeting was held on December 22, at 9.15 P.M., Mr. W. S. Turnbull, ex-president, in the chair. Mr. A. M. Macdonald read a paper on "Light, Natural and Artificial: Its Properties and Uses." The paper was an excellent one and was well received. Speaking of the electric light, he said it was undoubtedly the light of the future, and gave some interesting particulars showing the state of perfection to which this means of lighting had been brought in its adaptability to the lighting of dwelling-houses and public buildings. Mr. J. R. Hill afterwards read a note on some recent donations to the herbarium. One of these was a fine specimen of *Lycopodium clavatum* in the spore-bearing condition, from the wildest part of Aberdeenshire. Another was a specimen in flower and fruit of *Vaccinium Vitis-idaea*, interesting as being one of the adulterants of *Arctostaphylos Uva-ursi*. The specimen showed the spotted under surface of the leaf with its slightly crenate and distinctly revolute margin, and also the inferior fruit by which *Vaccinium* may be known from *Arctostaphylos*. Some chemical and other specimens were exhibited. The next meeting, to be held on Wednesday, January 12, will be devoted to "Notes and Queries," under the charge of Mr. Macdonald.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings London, W.C.

From the "*Trade Marks Journal*," December 29, 1886.

"MARTELLLO," "ARGENTINE BLACK LEAD," and "IMPERIAL LUSTRE"; for black lead (53,135-37-8). "The only pure," and other wording, on round label (53,259); for laundry blue. By John Johnson & Co., 79 St. Anne's Street, Liverpool.

"KEELING'S PRIZE MEDAL PURITY SOAP," and other wording, on fancy label; for common soap. By D. C. Keeling & Co., Blundell Street, Liverpool. 53,183.

"HAZELHURST'S UNICORN" (55,404-5); "Hazelhurst's Lavender," and "Hazelhurst's Best Wax" (55,408-11); for common and perfumed soaps; and "Hazelhurst's Cashmere"; for common soap (55,406). By Hazelhurst & Sons, Camden Soap and Alkali Works, Runcorn, Cheshire.

"HARNESSE COMPOSITION," other wording, and figure of a beehive in centre of an oblong label; for harness composition. By John Goodman, 8 Noble Street, London. 55,809.

"ALBION," within a diamond border; for English-made yeast. By Harvey Risk & Co., 18 Upper Mill Hill, Leeds. 53,201.

"LIGHTNING WASHER," in script; for perfumed soap. By F. W. Hunt, trading as Uren & Co., 13 Stapleton Road, Bristol. 55,339.

Female figure (California) distributing packets to children and others, with wording, on label; for disinfecting soap (55,512); candles, common soap, and other preparations for laundry purposes (55,513), and for perfumery (including toilet articles, &c., 55,514). By Jesse Ascough, Handsworth, Birmingham.

"CENTRIFUGED SOAP;" for all kinds of soap used for laundry purposes. By J. Sinclair, 65 Southwark Street, S.E. 55,554.

"MUSCULINE," and other wording, on label; for an embrocation for human use. By Ethelbert Clark, 2 Swiss Terrace, Stanstead Road, Forest Hill, S.E. 56,557.

"DRAPER'S COPYING INK," upon a circle which, with other wording, is upon a label; for a copying ink. By Bewley & Draper, 23 Mary Street, Dublin. 56,789.

Figure of a champagne glass partly within a circle, with word "Larmuth," &c.; for mineral and aerated waters. By G. J. B. Buckley and H. Comins, trading as Larmuth & Co., Clarence Road, Hackney. 57,002.

"KLEN-ZER, THE SOAP OF SOAPS," upon a design; for perfumed soaps. By J. Watson & Sons, Whitehall Soap Works, Leeds. 57,262.

"HERB BITTER," upon an oval fancy label; for a beverage for human use. By W. Martin, 6 Warwick Place, Newcastle-on-Tyne. 57,473.

Figure of a rabbit within a circle; for chemical substances, used for agricultural and other purposes, including insect powder, fly gum, disinfecting fluid. By F. W. Warren, 8 Neeld Terrace, Harrow Road, London. 57,551.

"ANTIFEBRIN;" for chemical substances, prepared for use in medicine and pharmacy. By Kalle & Co., Biebrich-on-Rhine. 57,556.

Figures of Venus and Cupids on the waves, and signature; for perfumery (including toilet articles). By Lecaron Gellé, trading as Gellé Frères, 6 Avenue de l'Opéra, Paris. 57,574.

Outline drawing of the neck of a bottle; for glass bottles (57,573), and for mineral and aerated waters (57,845). By Dan Rylands, Hope Glass Works, Barnsley.

"EXPRESS" (57,775), and "Opal" (58,035); for common soap. By Goodwin Brothers, Ordsall Lane, Salford.

"BRITANNIA;" for plate powder, black lead, and furniture cream. By C. E. Johnson, trading as Charles E. Johnson & Co., Scott Street, Hull. 58,155.

Heraldic design, combining characteristics of the arms of Great Britain and its principal dependencies; for chemical substances used for agricultural and other purposes, and for use in medicine and pharmacy; for candles, common soap, &c., and for perfumery and toilet articles (59,702-5); a similar design supported by a crusader, with figure of a lion at his feet; for the same articles (59,705-9). By Hodgson & Simpson, Calder Soap Works, Wakefield, Yorkshire.

Pharmaceutical Society of Great Britain.

COUNCIL MEETING.

THE Council met on Wednesday, January 5, at 11 A.M. All members were present, except Messrs. Atkins, Borland, and Williams.

The President took the chair at 11.20, and the minutes were read and signed. The President intimated that the absence of Mr. Atkins was due to domestic bereavement.

ELECTION OF ANNUITANTS.

The President in formally reported the result of the voting for annuitants, and that the following had been duly elected:—

Stone, Thomas W.; Rossiter, Anne H.; Chenery, Kate K. M.; Morris, Mary; Fife, George; and Horncastle, Anne.

PRESENTATION OF A MEDALLION OF THE LATE DANIEL HANBURY.

Mr. HILLS then rose and said that, on behalf of Mr. Thomas Hanbury, he had the pleasure of presenting to the Society a beautiful plaster cast of the medallion by Woolner of Daniel Hanbury, his late brother. The medallion was not only a lifelike portrait of the celebrated pharmacographer, but it showed faithful and artistic representations of two of the plants with which the name of Daniel Hanbury was indelibly associated. On one side was shown *Ipomoea simulans*, which Hanbury had proved to be the source of Tampico jalap; on the other was a representation of *Liquidamber orientale*, the plant which yielded liquid storax, and which had been the subject of a long and careful research by Hanbury. Personally he was very much gratified at being the medium of communicating this valuable work of art to the Society's collection.

The PRESIDENT said that the Society was extremely indebted to Mr. Thomas Hanbury for this valuable donation. This was only one of a series of good deeds done by him to the Society. The longer one lived, he said, one seemed to hear the more of the good work done by Daniel Hanbury. He had noted with pleasure, when mixing with the Commissioners of the Colonial and Indian Exhibition, how well his name was known, how far-reaching had been the influence of the work done by him, and how much he was appreciated. He had pleasure in moving that the best thanks of the Society be given to Mr. Thomas Hanbury for his donation.

ROUTINE BUSINESS.

A letter from the Clerk to the Privy Council approving of the examiners elected in December last was read. Several persons were elected members, associates, and apprentices of the Society. It was notable that a lady chemist and druggist (Miss Agnes Waldie, Linlithgow) was elected a member of the Society. Diplomas were granted to those who qualified as pharmaceutical chemists in December last (THE CHEMIST AND DRUGGIST, December 25, page 826).

North British Branch.—The President intimated that the annual statement of income and expenditure of the North British Branch, duly attested by Mr. Stephenson, treasurer, and by the secretary in Scotland, had been received. It was referred to the Finance Committee. A report by the secretary in Scotland of the work done during 1886 was referred to the Library Committee.

It was intimated that Mr. Alfred Harrison, of Headingley, near Leeds, having made the statutory declaration that he was in business before 1868, had been placed on the register of chemists and druggists.

COMMITTEE REPORTS.

Finance.—This report was read and adopted on the motion of the President.

Benevolent Fund.—This report was read in committee. It recommended three grants of 15*l.* each, two of 10*l.* each, and one of 5*l.*

The VICE-PRESIDENT moved the adoption of the report, and, as the motion was about to be agreed to, Mr. RICHARDSON rose and said that some remarks had been made at the last meeting by Dr. Symes in reference to annuitants, which were duly reported, and which he thought were calculated to harm the fund. The remarks were to the effect that, when a person became an annuitant, no further inquiries were made about him. The case was not so. The Council had power to stop an annuity if they thought that any annuitant was an unworthy recipient.

Dr. SYMES thought that there was no necessity for going into the matter, as the idea which he intended to convey, and which was properly reported, was that inquiries regarding annuitants, unlike those who made application annually for relief, were not made from year to year. He thought that his meaning was perfectly well understood, and that it would not hurt the fund in any way. (Hear, hear.)

Mr. WOOLLEY intimated that the girl Taylor, for whom he had previously solicited assistance, had got into the Commercial Travellers' School.

The report was adopted.

Mr. BOTTLE said that he thought from the President's remarks regarding the election of annuitants that there was a want of touch between the scrutineers and the Council. As the Council paid the money, he thought that the report of the scrutineers should be submitted to the Council officially, and not in the informal manner that it had been that day.

It was agreed that the report of the scrutineers should be formally laid before the Council in future.

LIBRARY, MUSEUM, LABORATORY, AND HOUSE COMMITTEE.

This report contained the usual references to the library and museum, and recommended a grant of 50*l.* to the Aberdeen and North of Scotland Society of Chemists and Druggists, and another of a similar amount to Professor Dunstan for work in connection with the Research Laboratory.

In moving the adoption of the report the PRESIDENT said that the most important matter in it was the grant of 50*l.* to the Aberdeen Society. He was sure that every member of the Council was glad that they had had an opportunity of going into the matter again, and with the assistance of the information laid before them by the Secretary of the Aberdeen Society, it was gratifying to learn that it was doing such excellent work. It was especially gratifying that in making this grant they were getting into touch with an association so remotely situated as the Aberdeen one, and which would appreciate the assistance.

The report was adopted.

The PRESIDENT also drew attention to a large photograph of Mr. Joseph Bosisto, which he had presented to the Society as a memento of his associations with the Society during his sojourn in England. A letter from Mr. Bosisto which accompanied this photograph was read, and the President expressed on behalf of Mr. Bowen, President of the Pharmaceutical Society of Victoria, his thanks for the reception given to him. The President added a few felicitous sentences regarding the matter.

CONCLUDING BUSINESS.

The report of the Board of Examiners of England and Wales of the examinations held last month was read. It was intimated that the Law and Parliamentary Committee had no report to lay before the Council. The draft (curriculum) Bill was considered on the previous night, and the result of discussion upon it was that it would require remodelling before it was brought up for consideration by the Council.

The remaining business consisted of the reports of the Building and General Purposes Committee, which, it was intimated, would be taken in committee. Our representative was accordingly requested to withdraw.

On resuming the PRESIDENT moved that the reports be adopted, and this was agreed to, the business which had occupied the Council in committee for about an hour being kept secret.

REPRESENTATIVE AUSTRALIAN PHARMACISTS.

THE Intercolonial Pharmaceutical Conference, whose proceedings we recently reported, brought together several of the eminent pharmacists of the Australian Colonies. Our colonial offshoot, *The Chemist and Druggist of Australasia*, published the portraits of these gentlemen on the occasion of the conference. These we now reproduce, with brief biographical notes.

MR. E. RAYMOND ASH, one of the representatives of Tasmania, is a native of that colony, and the son of Mr. Edward Ash, a pharmacist in Hobart, with whom he served his apprenticeship, and is now a partner. In 1878 he visited this country, and studied pharmacy and analytical chemistry in London and Paris schools.

MR. CUTHBERT R. BLACKETT, one of the delegates for Victoria, who welcomed the delegates in the name of the Society of that colony, has taken an active interest in pharmaceutical politics for thirty years, and was one of the promoters of pharmaceutical legislation in the colony. As one of the founders of the Society he has of course held, and still holds, office in it, first as a member of council and as secretary, then for three years as president (1878-80). Mr. Blackett is a member of the Legislative Assembly, is a man of high culture and scholarly attainments, and a fluent speaker and lecturer.

MR. GEORGE BONNINGTON was one of the delegates for New Zealand. He was in business for twelve years at Nelson, and is now in Christchurch, Canterbury, where he has established a thoroughly good retail business. He was the first secretary for the Canterbury district to the Pharmaceutical Society, and was appointed in 1880 the delegate to represent Canterbury at the first general meeting of Council. He was also Vice-President of the Society. He is an examiner to the Pharmacy Board of his colony, and registrar for Canterbury. Mr. Bonnington is a highly-respected and popular man.

MR. BOZON FREDERICK BOZON is amongst the first pharmacists who found their way from the mother-country to Australia. He was born in London, and as far back as 1846 was initiated into the mysteries of physic in the pharmacy of Mr. Robert Webb, High Street, Poplar, and was afterwards transferred to Mr. Thos. Davis, Bernard Street, Southampton. After two years' experience in London, he went to Cape Town as manager to Mr. H. C. Robinson, where he remained three years, and qualified himself as a pharmacist by examination. After a few more changes Mr. Bozon found himself in Sydney in 1858 as manager to Mr. W. T. Pinhey. Two years later he started in business, which he carried on successfully for twenty years, when he retired. Mr. Bozon is one of the pioneers of pharmaceutical legislation in New South Wales, and a founder of the Pharmaceutical Society of that colony. He is a member of the Council of that Society, also of the Pharmacy Board, and examiner in pharmacy.

MR. LANDON FAIRTHORNE, the President of the conference, is a native of St. Albans, Herts, England, and is in his 64th year. He emigrated in 1842 to Launceston, and was engaged as dispenser to two physicians of high repute in that town. Mr. Fairthorne passed his examination before the Court of Medical Examiners at Hobart in January, 1846, and then started in business as a chemist, but retired from it in 1859. In 1865, however, he repurchased his old business, which he continues to conduct in association with his son. Mr. Fairthorne is the oldest registered pharmacist in business in the British Empire. (Registration by Act of Parliament did not begin in Great Britain until the Pharmacy Act of 1852 was passed.)

MR. THOMAS HUNTSMAN is a registered pharmaceutical chemist (Victoria), a member of the Council of the Society of the colony, and was president thereof in 1884.

MR. JAMES MAYNE, F.R.M.S., is another of the young pharmacists who have recently found their way from the mother-country and done well in the Greater Britain. He was apprenticed to Messrs. Boyce & Son, chemists, Chertsey, near London. After attending two sessions at the Westminster College of Chemistry and Pharmacy, he went through

the Bloomshury mill in December, 1876, as well as the Apothecaries' examination. He migrated to Sydney in 1877, and is now established as an analytical and pharmaceutical chemist at Oxford Street there, his pharmacy being one of the most complete in the colony. Since settling down in Sydney Mr. Mayne has taken an active interest in pharmaceutical politics, and is now a member of the Council of the Pharmaceutical Society and of the Pharmacy Board of New South Wales. He is examiner in chemistry and botany to both bodies. During the conference Mr. Mayne gave evidence that he is possessed of much forensic skill, which, by the way, had previously been well shown in the "Incorporation Bill" of his Society, of which he was the author.

MR. THOMAS BOUCHER MELHUISE is a native of Taunton, Somerset, and is in business as a pharmacist at Sydney, N.S.W. He was apprenticed to the drug trade with his father. He was afterwards with Messrs. Hopkins & Williams, manufacturing chemists, and then with Mr. William Martindale, New Cavendish Street. Having qualified, he went to Paris, spent three winters in Rome with M. Sinimberghi, and one winter in Nice. Thence he went to H. Bilharz, Court Apothecary at Baden Baden, and afterwards spent a short time at Heidelberg, where he attended the lectures of Professor Bunsen. He returned to England in 1879, and in the same year went to Port Elizabeth, which he left, in 1881, for Melbourne. The climate here did not suit him, and he ultimately settled down in Sydney. He is a member of the Council of the Pharmaceutical Society and of the Pharmacy Board of New South Wales.

MR. J. A. POND, one of the delegates from New Zealand, affords us a notable example of the happy relations which exist between homœopaths and allopaths in his colony. Mr. Pond went from London to New Zealand in 1865 as a homœopathic chemist, which business he has carried on successfully in Auckland. He is an accomplished chemist; and, in addition to original work, from which several valuable papers have been published, is an analyst under the Adulteration Act of the colony. He is a member of the Society of Public Analysts, London, and also of the Society of Chemical Industry. Mr. Pond holds office in the New Zealand Pharmaceutical Society.

MR. HENRY WILLIAM POTTS, the delegate for Queensland, left England in 1873. He was in business for some time in Brisbane. A few years ago he fell into bad health, and sold out in order to take a tour through the southern colonies. He is again established in Queensland. Mr. Potts was one of the promoters of the Pharmacy Act of Queensland, and is a member of the Pharmaceutical Society of the colony.

MR. LUTHER R. SCAMMELL, F.C.S. (a representative of South Australia), is the second son of Mr. L. Scammell, the senior partner of the firm of F. H. Faulding & Co., wholesale druggists, Adelaide. He came to this country, and studied at the South London School of Pharmacy, and was medallist in chemistry in 1879. He and his brother are the only native-born South Australians who have passed the pharmaceutical examinations in this country. After passing these examinations Mr. Scammell served a term in the Public Laboratory, Kennington Cross, and since returning to Australia has had charge of the laboratory of F. H. Faulding & Co.

MR. W. H. SOWTER, the other representative of South Australia, is a native of England, but was brought to South Australia while very young. He was an apprentice and an assistant with Messrs. Faulding & Co., and is now in business as a pharmacist at Adelaide. He is treasurer to the Pharmaceutical Society of South Australia.

DYNAMIC TREATMENT.—"Patrick, you told me you needed the alcohol to clean the mirrors with, and here I find you drinking it." "Faix, mum, it's a drinkin' it and brathing on the glass oi'm a doin'."

A TEST FOR OLEOMARGARINE has been found by an American druggist. It is as follows:—Take the sample of supposed butter to be tested, and if you find a red hair as long as your arm, you may be satisfied that a woman made it, and that it is genuine butter, as oleomargarine is manufactured exclusively by short-haired or bald-headed men.



E. P. ASH.



C. R. BLACKETT.



GEO. BONNINGTON.



D. F. BOZON.



L. FAIRTHORNE.



THOS. HUNTSMAN.



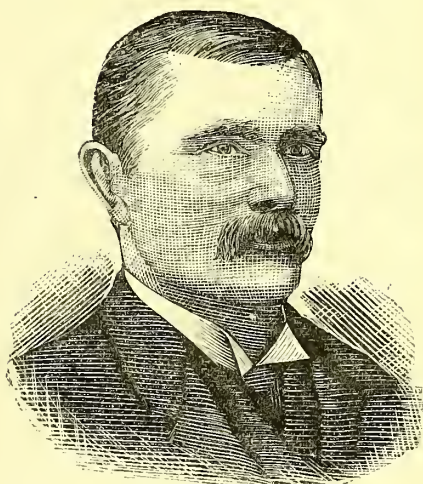
JAS. MAYNE.



T. B. MELHUSH.



J. A. POND.



H. W. POTTS.



L. R. SCAMMELL.



W. H. SOWTER.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE NEW BOARD OF THE ACADEMY OF MEDICINE.—At the last sitting of the year 1886 an election was held, constituting the Board as follows for the current year:—President, M. Sappey; Vice-president, M. Hérard; Perpetual Secretary, M. Bécлар; Annual Secretary, M. Proust.

THE FRENCH BOTANICAL SOCIETY, at its annual election last December, elected the following officers:—President, M. J. de Seynes; Vice-presidents, Messrs. Duchartre, Buffet, Monod, and Rouy; General Secretary, M. Malinvaud; Secretaries, Messrs. Mangin and J. Vallot; Treasurer, M. A. Ramond; Members of the Council, Messrs. Bescherelle, Bonnier, Bureau, Camus, Ad. Chatin, Cosson, Herincq, L. du Sablon, Maugeret, Petit, Rose, and Van Tieghem.

M. J. L. A. CREUSE, an American pharmacist now residing in Paris, has been elected a corresponding member of the New York College of Pharmacy. M. Creuse, a graduate of the college, was its delegate at the International Pharmaceutical Congress held at Brussels in 1885, and has thus been honoured with a distinction not lavishly bestowed, in recognition of services rendered at the international gathering.

M. CRINON, of the *Archives de Pharmacie*, a delegate of the Chamber of Pharmacists, has been as such elected one of the Vice-presidents of the "Union des Syndicats Professionnels."

TYPHOID FEVER.—Every four years the Paris Faculty of Medicine has within its power to award the Lacaze grand prize of 10,000f. to the writer of the best work on the treatment of fever, typhoid fever most especially. This time the prize has been given to M. Albert Robin, a professor of the faculty, and a hospital physician, for his last work on medical clinics and therapeutics. As the prize was not awarded four years ago, the accrued arrears make it worth 11,418f.

A PHARMACIST AS AN EXPERT IN A MATCH CASE.—Some months since the "Compagnie générale des Allumettes" caused the seizure of a lot of wax matches exposed for sale by a hairdresser at St. Etienne. The company alleged that, the phosphorus of the matches in question being yellow coloured, the goods were spurious, as the company use none but blue phosphorus for the tips. The hairdresser was, therefore, prosecuted before the St. Etienne Correctional Tribunal. But he stoutly maintained his innocence, claiming that the matches, when bought, were blue, but after exposure to sunshine had turned yellow, much to his astonishment. The court admitted the explanation, and gave judgment against the company. But wealthy corporations, employing lawyers at yearly salaries, always appeal when they lose a suit. The case accordingly came up last week before the Lyons Court of Appeal, which appointed as an expert to report upon the matter M. Cotton, a pharmacist of the first class. This selection is according to law, which declares all pharmacists of the first class competent experts before the courts in all chemical cases. Indeed, they are well qualified to act as such. But there is no love lost between the match company and members of the pharmaceutical profession. Under various pretexts the company has often annoyed them about the keeping of phosphorus, and tried to exert an inquisitorial supervision over the use they make of a necessary medicinal substance.

NUTS AND SALT.—The time-honoured practice of wetting their goods still remains in favour with dealers of questionable honesty in Paris and elsewhere. Now and then table salt is thus adulterated. The new device is to mix it with wet clay, which has the advantage of permitting the addition of quite a comfortable quantity of water—comfortable for the dealer—without changing much the appearance of the commodity. The attention of the authorities has recently been called to this new fraud, and as the State thereby loses some revenue, strict measures of repression are sure to be taken more speedily than if only public health were endangered. But it appears that walnuts have also recently been submitted to the wetting process, with a different intention, however. It is for the purpose of making old dry nuts look like fresh new ones. The clear result to the consumer is that, at present, nearly all the nuts sold by retail grocers are decayed

inside, and unfit to eat. At last the Council of Hygiene and Salubrity of the Seine department has been consulted by the prefect of police, and asked whether good ground exists to prohibit the sale of walnuts having undergone a prolonged wetting. A few days since M. Planchon, having been designated to elucidate the question and report thereupon, replied that, according to his experiments, walnuts submitted to this repeated wetting process are unwholesome. The effect of the dampness is to bring on mouldiness and decay of the kernel. Among the moulds thus formed he had recognised the *Rhizopus nigricans*, a well-known microscopic fungus of decidedly poisonous properties. Therefore the council deems there is good ground for prohibiting the offering for sale of walnuts thus adulterated. It is to be hoped that, when grocers hear the name of the fungus they have been cultivating, they will be so terrified that they will stop the wetting without waiting for repressive measures.

THE PARIS PHARMACEUTICAL SOCIETY.

The regular monthly meeting was held on January 5, at the usual place, the *Salle des Etats*, in the college building. Its being the annual gathering the time was chiefly occupied with the installation of new officers, reports of committees, and other business of retrospective interest.

The retiring president, Prof. Prunier, began the proceedings by reading an address, in which he reviewed the progress of pharmacy in general, and of the society in particular, during the past year, paying a deserved tribute to the deceased members, and ending with very wise advice for the future. M. Desnoix, the incoming president, on taking the chair, read a short address of thanks and plans for the future. Prof. Planchon, the perpetual secretary, with the ready gift of speech which seems to be natural to Southerners, next delivered impromptu a very neat address, thanking the members for the support they had afforded him in the past, and auguring for the future a period of tranquillity and mutual goodwill. Of course the allusion to the past troubles of the college due to self-will and overbearing was understood by all.

M. Portes, the retiring secretary, next read his report, embracing a review of the work of the whole year just ended. He recalled all the papers read, discoveries made, and honorific distinctions conferred on members of the society. An allusion having been made to the bad condition of the books and papers belonging to the society—the term *fouillis* had been applied, some say justly, to the collection—M. Planchon remarked that a project was under consideration among scientific societies which would bear upon the matter complained of. Meetings of perpetual secretaries had been held, and he hoped he would be able at the next meeting to communicate definite results. In the meantime a more convenient place in the college had been attributed to the society, and soon, he hoped, everything would be in proper shape.

Chairmen of committees next read their reports, and the various prizes awarded during the year were formally distributed.

The last report was that of the sulphate of quinine committee, read by M. Marty, its chairman. The substance of this report has already been published in *THE CHEMIST AND DRUGGIST*, and as its discussion has been postponed to the meeting in February, no other mention of the subject is now necessary. The report of the financial committee, always an important one, is to be presented at the same sitting.

Personalities.

MR. FRANCIS FRY'S WILL.—Probate was granted on December 29 of the will, with two codicils, of Francis Fry, formerly of Bristol, chocolate manufacturer, late of Tower House, Cotham, who died on December 12, and the value of whose personal estate was affirmed at upwards of 80,000f. by the executors. Mr. Fry leaves his collection of Bibles and New Testaments to his son, Mr. Theodore Fry, M.P. His wife, Matilda Fry, gets an annuity of 1,300f. and the interest of a sum of 5,000f. for her life. The residue of his estate is divided amongst his family, and there are no bequests to public charities.

Trade Notes.

MESSRS. W. CAUDERY & Co., chemical brokers, Fenchurch Street, have admitted Mr. Richard B. Jane into partnership.

MESSRS. LIHME, TOMKINS & Co., of 11 & 12 Great Tower Street, E.C., have dissolved partnership.

MESSRS. TYPEKE & KING, chemical manufacturers, have removed from 110 Cannon Street to 22 Laurence Pountney Lane, E.C.

MESSRS. WILSON, SMITHETT & Co., colonial brokers, of 41 Mincing Lane, E.C., state that Mr. Sydney John Wilson, son of their senior, has been admitted a partner.

MESSRS. W. ROSSELLI & Co., American and colonial produce agents and brokers, have established business at 11 Cullum Street, E.C.

MR. CLIFFORD, of Bedford, has disposed of his business to Mr. Elliott, late of Cirencester. The transfer was effected by Messrs. Berdoo & Co., of Aldgate, London.

MR. J. D. SMITH, JUN. (grandson of the head of the firm), has been taken into partnership in the firm of Smith & Sons, wholesale druggists, Norwich.

MR. GRIFFITH, late of Hadleigh, has purchased the business of Mr. Haffenden, at The Medical Hall, Canterbury, through the agency of Messrs. Berdoo & Co., of Aldgate, London.

MR. HAFFENDEN has taken over the very old-established business carried on by Messrs. Morse for the past thirty-five years at Deal. Messrs. Berdoo & Co., of Aldgate, conducted the transfer.

MR. E. TOMKINS, late of the firm of Lihme, Tomkins & Co., will continue business at 11 & 12 Great Tower Street, E.C., in partnership with Mr. Isidor Abisidid, under the style of E. Tomkins & Co.

MR. A. G. LIHME, late of the firm of Lihme, Tomkins & Co., Great Tower Street, has established business as commission merchant at 21 Mincing Lane, E.C., under the style of A. G. Lihme & Co.

MR. THOMAS BEECHAM, of St. Helens, gave us a call a few days ago, and spoke very cheerfully of the pill trade. Mr. Beecham tells us that during the last two years he has nearly, if not quite, doubled the sale of his famous pills.

MR. J. N. HORSFIELD, of Sweet Street, Leeds, has disposed of his business to his sons, Edmund and Frank Horsfield, who in future will carry it on under the style of J. N. Horsfield & Sons.

MR. W. WOODS, 50 Bedford Street, Plymouth, has taken into partnership his son, Mr. W. Herbert Woods, pharmaceutical chemist, and the business will henceforth be conducted under the style of Woods & Son.

MESSRS. BRADDOCK & BAGSHAW, Oldham, ask us to correct a statement in our issue of December 25 that three shops are carried on by them within half a mile. Their new establishment is over a mile from one of their other pharmacies.

MESSRS. J. SCHWEPPE & Co. (Limited) have lately erected a factory for the manufacture of aerated waters at Lithgow Street, Collingwood, Melbourne. The water they use is obtained from Mount Macedon, and has to be conveyed to the works.

MR. JAMES MORRIS RUCKER retires from the business of Messrs. S. Rucker & Co., colonial brokers, 11 & 12 Great Tower Street, and ceases to be a partner in the firm; but the business will be continued by Mr. John Henry Roberts, under the same style as heretofore.

MESSRS. SCOTT & Co., manufacturing chemists, of the Crown Chemical Works, Marshgate Lane, Stratford, have dissolved partnership so far as regards Mr. W. T. Scott. The business will be continued by the remaining partners, Messrs. E. N. M. Kindersley and J. E. Johnson.

MESSRS. ANTONY GIBBS & SONS, of 15 Bishopsgate Street, E.C., state that Mr. James Charles Hayne has retired from active business and ceased to be a member of their firm, as also of the firms of Gibbs & Co., in Chili; Antony

Gibbs, Sons & Co., Liverpool and Bristol; and Gibbs, Bright & Co., in Australia and New Zealand.

MESSRS. POTTER & CLARKE, Botanic Druggist, of 75 Weston Street, S.E., and elsewhere, have just issued a new price-list of herbs, drugs, and preparations thereof, and various sundries. The list is specially valuable, owing to its containing the names of so many uncommon and rare drugs. We notice that the firm is now in the seventy-fifth year of its existence.

STROPHANTHUS.—The consignment of this drug to Messrs. Burroughs, Welcome & Co., to which we referred last week, has arrived. The consignment is the largest which has yet been received, and the firm state that they will be able to greatly reduce the price of the preparations. It will be noticed that Messrs. Christy & Co. report the arrival of another consignment to them.

MESSRS. CRESSWELL BROTHERS, of 13A Red Lion Square, sponge merchants, announce that they have taken additional premises at 2 Red Lion Square, and that they have transferred their offices and show-rooms to the new address. They have published a new price-list, with illustrations, and describing several important novelties, especially their "bin cases" of Cuban sponges in assorted sizes.

MESSRS. MAY & BAKER, of Battersea, have issued a new price-list of chemical preparations. The firm are sole manufacturers of the new disinfectant, "Bromodine," which they have added to the number of their products. We notice that the names of the principal agents of the Battersea firm are now printed on the list. Messrs. Harrison & Whiffen, of Sydney, act as representatives for Australasia; Mr. J. F. Macnaughtan, 20 Cedar Street, New York, for the United States; Mr. D. Sinclair, 55 East Howard Street, Glasgow, for Scotland; and Messrs. Colvin & Co., Dublin, for Ireland.

SYRUP. HYPOPHOSPH. COMP.—The recent discussion in our columns of the merits of the various formulæ for the compound syrup of hypophosphites showed that those which have been published are not altogether perfect. Individual experiment and careful manipulation during manufacture are essential to the success. One of our correspondents (Mr. F. J. Yeatman), who showed intimate acquaintance with the subject, has submitted to us a sample of the syrup which he prepares, and which he is now bringing before the trade. The syrup is a transparent, straw-coloured preparation, quite free from sediment, and practically neutral to litmus, although it darkens the colour of cochineal tincture, which may be taken to indicate slight alkalinity. The syrup possesses a feebly bitter and marked chalybeate taste, and on examination we find that it contains the important constituents as stated by the maker, whose announcement will be found on another page.

OXYGEN AND OXYGENATED PREPARATIONS.—Since the Messrs. Brin discovered their method of preparing oxygen from atmospheric air by subjecting it to the action of barium oxide at an increased temperature, an impetus has been given to the use of the gas as a therapeutic agent. In bronchial affections, Bright's disease, anemia, and many other complaints inhalations of oxygen have been attended with good results. It will be recollected that the late Empress of Russia was stated to have been kept alive for many weeks by inhalations of oxygen. To meet the demand for a pure gas, a company has been formed in London under the style of "Brin's Oxygen Company," with offices at Connaught Mansions, Victoria Street, Westminster. This company supplies pure oxygen gas, compressed in copper cylinders, containing 10, 15, and 20 feet. The cylinders are fitted with taps for controlling the flow of the oxygen. The taps have nipples attached, which may be fitted to any suitable inhaling apparatus. The gas may also be used for other purposes for which oxygen is required. Oxy-aerated water is also supplied. This is distilled water charged with oxygen at high pressure, and which effervesces slightly. It has been highly spoken of by Dr. Dujardin-Beaumetz, who uses it instead of seltzer water. It appears to stimulate digestion, and is an excellent table-water for gouty and diabetic subjects.

AT NEWPORT, U.S.A.—A gentleman enters a drug store and winks at one of the clerks several times. "I beg your pardon," said the clerk, "I'm somewhat new at this business. Would you please repeat it?"

Veterinary Treatment.

RINGBONES.

THIS is a term given to an abnormal growth or deposit of bone upon the pasterns or lower bones, of the legs. There are two pastern bones, called respectively the long and short, or *Os suffraginis* and *Os corona*.

All breeds of horses are liable to ringbones, but heavy draught-horses are more especially liable, as their bones are short as compared with the blood horse, and more upright, and concussion is more violent as a consequence. The arrangement or anatomical construction of the horse's foot and leg is such as to minimise the chances of concussion and subsequent inflammation; but it must be remembered we are almost always dealing with animals in an artificial state when we are asked to prescribe for lameness or deformity. Ringbone may occur on the front or hind pasterns; it may be on the upper bone, when it is called "high ringbone," or on the lower, just above the hoof, when it is denominated "low ringbone," and must be distinguished from sidebone, of which we shall treat hereafter. It is often hereditary, and found upon the same horse as splint, spavin, and other exostoses, as growths of bone are technically termed. It should be remembered that the growth of a ringbone is from the *outside*. Bones do not grow from within outwards, but from the periosteum, or covering membrane, and when by concussion this membrane becomes inflamed its function of secreting bone is excited, and calcareous phosphatic matter is produced in excess. Unless ringbones happen to be an hereditary production, the animal having a bony diathesis, or predisposition to throw out deposits of bone, they are caused by a greater strain than the existing bones can endure, and the production of more bone is within certain limits a physiological process destined to prevent the recurrence of the strain by providing against a like contingency. The process of inflammation and the products of inflammation are viewed in a totally different manner than formerly. Inflammation of any structure is in reality an effort of nature to accommodate the parts to altered circumstances. This may best be illustrated by reference to the human hand. The soft palm will blister with an hour's rowing; the blister is the result of inflammation. The sequel is a corn, and the rower's altered condition will soon enable him to use the oars without blistering. If he leaves off rowing, and the corns are no longer required, nature will absorb them or cast them off. If this is borne in mind in the treatment of horses good results will follow. All ringbones do not require the same treatment. We will suppose a client has a young carthorse which has fallen lame with incipient ringbone. This is the time to use a sedative or evaporating lotion, in order to modify the extent of the inflammation, and not produce a lot of bone, which will be an eyesore and a detriment to the sale of the horse. In such a case an excellent lotion may be made as follows:—

Acid acetic	3j.
Tinct. arnicæ	3ij.
Liq. plumbi acct.	3j.
Spt. vini	3j. vel 3ij.
Aq. dest. ad	0j.

M. ft. lotio.

To be applied on a wet swab or bandage, renewing it frequently. In a young horse this will probably so reduce the irritation in the course of a few days that he will go sound again; but the *cause* must be removed, and the colt turned out to grass till his bones become more consolidated and fit to bear the concussion and strain of starting heavy loads on macadamised roads. If the owner cannot or will not be persuaded to turn the colt out, or, as often happens, has not the capital to invest in another, then blistering must be resorted to. Blistering will probably *not* remove the ringbone, as we recently informed a correspondent, but it will absorb some of the deposited material, and, by thickening the skin and subjacent structures, give increased support to the parts, as does the corn upon the rower's hand. It often happens that, with a steady driver or considerate carter, a ringbone will entirely disappear, the horse never being again subjected to so severe a strain as that which caused it, and

its absorption being undertaken by Nature because found to be unnecessary.

This does not apply to hereditary ringbones; their absorption is seldom accomplished with or without treatment. A great many cart-horses have ringbones without experiencing any particular inconvenience, and they are best let alone unless there is lameness or a palpable increase in their size, when blistering should be resorted to. Our readers are all acquainted with good recipes for blisters; but there are blisters and blisters, and before deciding what to use the question should be asked at what age and under what circumstances has the subject developed ringbone. If it is a recent case, a cantharides blister will do well enough. If of long standing, then—

Hydrarg. biniodid.	3j.
Adipis ad	3j.

M. ft. ung.

Three or four ounces will be required for a cart-horse's leg even when clipped tolerably close. All veterinary preparations should have an allowance for waste; if it be an ointment some will run down and fall off, and if it be a drench some will be spilt. "Half in and half out, like a farrier's drench," is quite a stable proverb. A practical prescriber will not fail to tell his client to tie the horse's head up for at least two nights and days, lest the patient should gnaw the parts, damage the skin irreparably, and blister his own nose, a most unsightly accident, which causes many a horse-owner to pay half a guinea for having a horse blistered when he might have got the materials for a few shillings and done it himself. A basket suspended from the ceiling can be used for the food if the horse shows a disposition to strike the manger with a front leg that has been blistered. Whenever a blister is prescribed for any of the lower parts of the legs the owner should be cautioned to remove the straw, as much unnecessary pain and sleeplessness is produced by the ends tickling and irritating the blistered surface.

On the third day after blistering a simple ointment should be used to soften the skin and prevent cracks and ulceration; this is very grateful to the patient, and will usually prevent him from gnawing it when his liberty is restored to him and the opportunity given to lie down. Blisters indifferently applied cause pain without benefiting the animal, and humanity demands that we shall take every care that it is done properly, not in a perfunctory manner, requiring repetition, or, as with acid sulph., causing sloughing of the skin and permanent blemish. Careful veterinary surgeons, after seeing that the limb to be blistered has been properly clipped, begin the operation by putting a little ung. simplex into the heel, as that is the part most likely to crack and cause lasting trouble.

Large surfaces should not be blistered with cantharides, as absorption and kidney disease have been known to occur.

The following is an effaceal blister, and in much request by farriers:—

Pulv. cantbar.	3j.
.. resinae	3j.
Adipis	3iv.

The lard and resin to be melted together, the cantharides added and stirred till cold.

Preparations of hyd. bichlor. and blisters containing ol. terebenth. or tereb. venet. should be avoided: they are extremely painful, liable to produce sloughing, and not *lasting* in their effects, whereas the benefit of a biniodide blister is often observable for months after application.

If a horse is gross and disposed to have swelled legs, he should be kept on bran mashes for twenty-four hours, and get a physic ball of from 4 to 6 drachms, according to his size. Severe blistering, and the severer operation upon a horse in a plethoric and unprepared state have been known to produce lock-jaw and death.

HOW TO PROVE HIS DEVOTION.—He (just been refused): "Then life has no further charm; I shall kill myself." She: "By poison?" He: "Probably." She: "Well, you'll excuse my mentioning it, but brother Jack has just opened a chemist's shop, you know, and would you mind buying the poison of him? It would encourage poor Jack and prove your devotion to me." (He still lives.)



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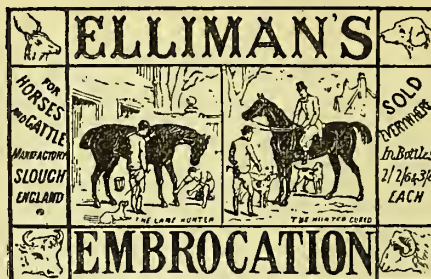
MEDICATED BISCUITS—"HERON," Nos. 1, 2, & 3.

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Finest powdered, 14s. per cwt.; in 7, 14, 28, 56 lb. Packages, 16s. per cwt net, bag included, delivered free in London. Samples post free. [3]

B. S. MUMFORD, STEAM MILLS, FARRINGDON ROAD, LONDON, E.C.



EDITORIAL NOTES.

EXPORT OF SPIRITUOUS PREPARATIONS.

IN our issue of November 6 we commented upon the unsatisfactory condition of the British laws governing the manufacture of spirituous preparations in bond, and the loss thereby accruing to British manufacturers, as illustrated by a letter in the same issue. Since that publication we have had the satisfaction of seeing the question actively taken up by the London Chamber of Commerce. A committee of the chemical section of that body has been appointed with instructions to prepare a report on the spirit duties as they affect druggists and perfumers. Previous to the appointment of that committee we had instituted inquiries concerning the spirit duties in foreign countries, and on another page we print the German by-laws on the subject, as the first-fruit of our investigations. It is extremely difficult to obtain full and reliable data concerning the laws affecting the export of spirituous preparations from Germany. Manufacturers are naturally reluctant to impart information on the subject, and it would seem as if a hint had been given to Government officials to turn a deaf ear to all inquirers. Indeed, printed copies of the by-laws which we give in another column are not even extant, these regulations being only distributed officially in manuscript to the custom-house officers for the guidance of the staff.

The laws here mentioned do not affect the territory of Hamburg, a city still occupying an exceptional position as a free port. The German laws appear to be framed entirely in the interests of large firms, and under their operation the smaller manufacturer is practically no better off than he is in this country. In all probability the case is different in Hamburg, which we understand to be the centre of the German trade in tinctures, and we hope to be in a position shortly to describe the spirit laws of that city so far as they affect the drug trade. Inland excise duty is levied in Germany at the distilleries from the mash in the fermenting vat, and from time to time the distiller has to submit to the excise authorities a minute forecast of the work he intends accomplishing within a certain period—say a month. The excise officers may then at any time of day or night visit his distillery without notice and overhaul the whole of his working, comparing the state of things with the forecast submitted. Once the ready-made product has left the distillery it may pass freely throughout the country without further check or supervision. In Germany a drawback at the rate of about

8s. per hectolitre of 50 per cent. alcohol is allowed to *bond-fide* manufacturers of perfumed spirits of German origin. The allowance is made on the basis of strength of the preparation of 50 per cent. of pure alcohol, although the manufacturer is allowed to claim drawback upon the actual strength. But there is an additional rule, though not mentioned in the by-laws, fixing the minimum percentage of pure alcohol at 35 per cent., below which strength no preparation is permitted to pass out under the regulations. This also applies to consignments in wood, which, as in the case of ordinary spirit, must be cleared in lots of at least 68·7 litres at a time.

One of the chief objections to the working of the German law appears to be that merchants or agents cannot obtain any drawback whatever except through the manufacturer. A further condition rendering it objectionable to exporters on a small scale is the comparatively high minimum of clearances prescribed, viz., nearly 121 pints, in one lot, at a time; the more so since this condition is complicated by the rule demanding even-sized flasks or bottles; for, considering that perfumery is mostly put up in bottles for the retail trade, holding from $\frac{1}{2}$ oz. or so to 3 or 5 oz., this rule does not meet the interests of small manufacturers having to export moderate assorted consignments.

In France the administration of the *contributions indirectes* and of the customs jointly are the agents for the return of the excise on spirits used in the manufacture of perfumery and medicines. In that country all articles in which spirits are used are manufactured in bond. Such preparations as are exported are taken out of bond by the manufacturers under a so-called *acquit à caution*, and the custom-houses take this document as a voucher for the quantity exported. By manufacturers in bond are understood persons holding an open account with the excise, and whose places are under the control and supervision of the officers of the *administration des contributions indirectes*. Preparations in which spirits are used are either manufactured under known formulæ or tested after manufacture in the ordinary way. The quantity of spirits in the article exported is noted in the *acquit à caution*. Only such druggists or perfumers as are in possession of a privilege of bonding can export spirituous preparations duty free.

In the United States any manufacturer of medicines, preparations, compositions, perfumeries, cosmetics, cordials, and other liquors containing spirits, carrying on his business in a constituted export warehouse, is authorised to withdraw from any distillery warehouse so much distilled spirits, in original packages, as he may require for his purpose, without the payment of the internal revenue tax thereon. The manufacturers must give bonds for \$50,000, and the manufacture has to be effected in approved bonded stores, entirely distinct from other portions of a factory. It is not practicable, therefore, to carry on the manufacture of spirituous preparations for export, duty free, in a small way, and as a matter of fact the trade is entirely in the hands of large manufacturers. The United States Customs do allow a drawback on distilled spirits, but only when such spirits are exported in distillers' original casks or packages containing not less than 20 wine gallons each.

It does not appear, therefore, that in either of the three States alluded to any much greater advantage is offered to manufacturers of druggists' alcoholic articles than in England. From this remark, however, Hamburg should probably be excepted. The whole of the export trade in these manufactures is perhaps too small and too varied in character to make it likely that any sweeping change could be made in the laws affecting spirits, so as to admit of drawback being allowed; but it is certain that, with some sort of co-operation

among wholesalers and others, such facilities might be granted by the Board of Customs as would prevent the wanton transference of this portion of business to other countries.

PATENT MEDICINE LAW.

As civilisation advances specialism develops itself. In medicine the demand for a directory of specialists grows upon us, and in law a similar state of things is resulting. But not only will each branch of legal practice require its special practitioners, but some day round each Act of Parliament will cluster its particularly-qualified interpreters. General proficiency can hardly be expected if all Acts are capable of such delicate distinctions as is the Medicine Stamps Act. Messrs. Newbery & Sons have favoured us with a reading of their latest correspondence with the solicitor to the Board of Inland Revenue, to whose ingenuity in interpretation we have previously had to render homage. This correspondence conveys an important piece of information.

It appears that early in December a chemist paid a fine of 2*l.* for selling a preparation which he described as "Corn Eradicator. Sold by A. B. C." Messrs. Newbery, therefore, wrote to the Board asking them if the following label would render liable to stamp duty the goods to which they might be applied:—"Corn Eradicator. Prepared by Smith & Co., London, N. Apply the solution every night until the corn shells off. Price 6*d.*" The answer was that articles so labelled would be liable to medicine-stamp duty. But in reply to another letter, Messrs. Newbery were informed that the substitution of the word "Plaster" for "Eradicator" would free the article from this liability. We quote the next letter and reply, which wind up this inquiry:—

SOLICITOR OF INLAND REVENUE, SOMERSET HOUSE.

December 29, 1886.

DEAR SIR,—We thank you for yours of December 28, and note the purport of your reply. We should be further obliged if you would kindly inform us how we might ourselves have determined from the reading of the Act imposing the medicine duty that the proposed label for Corn Eradicator must be used with a duty stamp if at all, whilst if the word "Plaster" be substituted then no stamp is required. It is also to be remembered in this connection that the use of the words "Corn Solvent, prepared" (for example) "by Smith & Co." is permitted without use of the stamp. It would be a convenience to us if you would state what is the underlying principle on which for the purpose of assessment to the medicine duty the distinction now in question between corn eradicator and corn solvent and corn plaster is drawn. Our customers who make sales of corn preparations have, some of them at least, expressed to us their inability to tell which preparations are liable to duty, and which are not liable.

We are, &c.,

(Signed) NEWBERY & SONS.

Solicitor's Department, Somerset House,
December 31, 1886.

MESSRS. NEWBERY & SONS,—GENTLEMEN,—In reply to your letter of December 29 I have to say that in administering the Medicine Stamps Act the Commissioners of Inland Revenue do not press for payment of medicine stamp duty upon a medicine or medicament that is merely described by the name of the ailment or complaint that it is intended to cure, e.g. "Corn Solvent" or "Corn Plaster." If, however, the description implies in addition a recommendation, as is the case in "Corn Eradicator," such recommendation deprives the article of the benefit of this lenient interpretation of the law.

I am, &c.,

(Signed) H. L. BOND.

We knew before that "Cough Mixture" was permissible, though "Mixture for Coughs" could only be used with

stamp. Now we learn that the line of liability lies somewhere between "Corn Solvent" and "Corn Eradicator"; but the underlying principle is too intangible to be caught by our vision. We hope, however, Messrs. Newbery are satisfied.

BRITISH AND GERMAN CHLORIDE OF MAGNESIUM.

A LONDON merchant has brought under our notice a remarkable instance of the success which is attending the efforts of German manufacturers of chemicals to supplant British firms in what we have been accustomed to regard as our own markets. Chloride of magnesium is largely used in India as an antiseptic ingredient in the size employed for the warp of the native cotton fabrics. The firm we refer to have been in the habit of shipping this chemical monthly in considerable quantities. For some time a Manchester firm have supplied them, but recent offers from Germany induced them to obtain tenders. The Manchester firm were well aware that they had to compete against a German house, and the best quotation they could offer was a price, f.o.b. at Birkenhead, which, on adding freight, primage, and insurance, made the cost 4*l.* 16*s.* 9*d.* per ton net at Bombay. The Hamburg exporters quoted 3*l.* 11*s.* 8*d.* net, delivered at Bombay all charges paid; and they intimated that for still larger quantities they were willing to contract at even lower rates.

A sample of the German article was sent to the beaten Manchester manufacturers, and they reported that they could find no fault with it; while the agents in India, writing in reference to the first shipment to them, declared the new article to be perfectly satisfactory. We have obtained a sample of the German product, and find it to be a hydrated chloride of magnesium. It is in the form of fused pieces, milk white, and very deliquescent. It is remarkably pure, being free from other bases, and contains a scarcely distinguishable trace of sulphate. Large quantities of this salt are, it is understood, produced at the Stassfurt mines, where it exists in association with other chlorides. But from what we hear we believe that it is not the natural product from Stassfurt which finds its way into commerce, but a by-product of the ammonia-soda industry. In manufacturing bicarbonate of soda from the chloride by this process, the ammonia employed is changed into ammonium chloride. To reconvert this into hydrate it is heated with lime. About six years ago the suggestion was made that magnesia should be used instead of lime, because the calcium chloride formed was entirely waste; the magnesium chloride, however, could be utilised either by subjecting it to Weldon's process for the recovery of hydrochloric acid, or as a marketable commodity. Our inquiries have elicited the fact that a large firm of soda manufacturers in this country hope to be able to supply magnesium chloride sooner or later, and from this we gather that the article which the German firm supplies is the by-product referred to. Magnesium chloride might be used in pharmacy instead of the sulphate for preparing the carbonate, it being much cheaper.

We trust some competent authority will give us some explanation of the facts we have stated, and which on the surface appear to be discreditable to our national ability.

MEDICAL STUDENTS.

IN our issue for July 10, 1886, we referred to the work of the statistical committee of the General Medical Council regarding the registration of medical students, and the record of their career as it exists in the books of the registrar of the Council. Our remarks were based upon the second

report of the committee, and referred more particularly to the first year of the quinquennium, 1871-5. We have now received the third report of the committee, which completes their work, so far, and summarises the statistics of the whole period. There is thus included a tracing of the destinies of 6,403 students who were registered during the period 1871-5, together with such facts as the average period of study, the nature of the qualifications, and the schools whereat they received their training. The result is a mass of very interesting information; and if, as it is proposed, the inquiry is continued at intervals of five years, the combined records will certainly influence the teaching of the schools. The registration of medical students by the General Medical Council was first proposed in 1859, and in 1861 the Council took steps to enforce the registration of all students; but owing to the fact that in the medical profession there are many examining bodies, each of whom had their own method of registering, and which registration was sufficient to allow the student to proceed to the first professional examination, several years elapsed before students as well as examining bodies recognised the necessity for registration at the commencement of study. About the year 1870 a better system began to be followed, and now registration has passed entirely out of the hands of licensing bodies to the officers of the General Medical Council.

The most important fact brought out by the present report is that of the 6,403 students registered as entering during the quinquennium, 4,472, or 69.84 per cent., have since qualified to practise, and the balance, 1,931, or 30.16 per cent. have not as yet registered any qualification. It thus appears that of every three persons who begin medical studies two only succeed. If all allowance be made for those who die and those who give up their attempt very early in their career, there yet remains a large number who remain in the profession and practise it without qualification. It is satisfactory to note that the London students come out well in the qualification list, no less than 73.72 per cent. having qualified during the period, while (omitting the comparatively small number of students abroad) Irish students are lowest with 65.67 per cent. We need not follow the report in its intricacies of single and double qualification, and as to the numbers of students attending the various schools in the kingdom; suffice it to say that the students of English provincial schools have the unenviable top position amongst singly qualified men, while the students of Scotch schools are highest amongst the doubly qualified. A very large majority of English students enter for the surgical qualification of the Royal College of Surgeons, England; and as, until recently, the qualification of the Royal College of Physicians was practically useless to them, they had to go elsewhere for the medical qualification which they must possess before certain privileges are open to them. It is therefore interesting to trace the migration of these students to other qualifying centres. We find that of the 4,453 qualified practitioners, forming the total outcome belonging to the quinquennium, no fewer than 1,227, or 27.55 per cent., obtained one or other or both of their qualifications in a division not that of their registered place of study. Thus 502 of the 2,262 English students qualified at the Royal College of Physicians, Edinburgh, and it is curious to note that 56.81 per cent. of those qualifying from the Bristol Medical School resorted to Scotland; while 25.84 per cent. of those qualifying from the Liverpool Royal Infirmary incurred the perils of a sea voyage by crossing over to Ireland. It has always been supposed that many students went from the district in which they studied to another for their qualification, but to what extent this happened could never be guessed until this investigation was made, and even now it is remarked in the report, "we have the record of the

successful migrators only; it is impossible to say how many migrated without success." The fact that a large proportion of students from a particular school select one examining body for their qualification seems to be in the nature of things. The same obtains in a less degree in pharmaceutical schools, some teachers preferring one board of examiners to another, and their opinion influences the conduct of their students in the matter.

Regarding the destination of the students—that is, where they practise after qualification—we learn the following interesting facts:—"The School of Physic in Ireland send abroad the greatest proportion of practitioners, viz. 16.77 per cent., being closely followed by Westminster and Charing Cross Hospitals. If we wish to know what relation medically Ireland bears to the army (including the Indian Medical Department), we find that 13.69 per cent. of the practitioners whose places of study were in Ireland are in the army or Indian Medical Department; and that of all the army surgeons belonging as registered students to the quinquennial, and whose names appear in the *Medical Register* of the present year, Ireland contributed 43.26 per cent., or more than England herself, who has nearly two and a half times the number of practitioners from which to select. The School of Physic contributed the greatest number of army surgeons, but Queen's College, Cork, the greatest proportion. Of English places of study, St. George's Hospital stands highest in this respect, being very nearly on a par with the Irish schools." It is also remarkable how large a proportion of practitioners choose for the scene of their practice the town in which they studied. Thus, 31.72 per cent. of the practitioners who were London students practise in London; 27.93 per cent. of those in the provinces practise in the very town in which was their place of study; many more practise in the neighbouring towns and villages. But in Scotland only 12.57 per cent., and in Ireland only 11.90 per cent. are thus attracted.

The Nilgiri Nettle. From recent advices from Madras we learn that there has been formed at Ootacamund a society for furthering the acquirement of more intimate knowledge of the botany, geology, and ornithology of the district. The society has been named the Nilgiri Natural History Society. Mr. Lawson is the first president, and Mr. David Hooper, the Government quinologist, acts as secretary. At present meetings are held fortnightly, and excursions are also made. It is contemplated to form a museum of the specimens which are collected on these excursions. At the last meeting of the society Mr. Hooper read a note on the sting of the Nilgiri nettle (*Girardinia palmata*). This nettle yields a useful fibre, but from the number of stings that clothe all parts it is very difficult to collect it. The stings, or glandular hairs, resemble in shape those of the common nettle (*Urtica dioica*). They leave no abrasure of the skin or dangerous symptoms the next day. The result of Mr. Hooper's examination of the secreting fluid of the sting is that he has found it to contain formic acid, the body to which is due the irritating effects of the sting of such insects as red ants, bees, and mosquitoes. As the nature of the sting of nettles has been a point of uncertainty, Mr. Hooper's observation is of considerable interest.

* *

Medical Degrees. The students who attend the various medical schools of London have a grievance, and that a long-standing one, which greatly militates against their future position in the profession. That is, that the only qualifications which are open to them in London, viz., the Apothecaries' Hall licence and the licences of the Colleges of Physicians and Surgeons, do not permit them to take the courtesy title of doctor. The medical degree of the London University can only be obtained after a very stiff examination, which is only attempted by superior men; it is, in fact, an honour examination. The want of an easily-acquired

degree has had its effect upon the London schools, and has driven a very large number of students to Scotch universities, in which the double qualification carries with it the courtesy title "doctor." There has for a long time been an agitation to remedy the position of London students, and this has lately resulted in a debate amongst the fellows of the Royal Colleges of Physicians and Surgeons, the outcome of which is that it has been resolved "that it is desirable and practicable to grant degrees in medicine and surgery to persons who have passed the conjoint examinations of the two colleges." At the same time it was agreed "that an application be made to the Crown by the two colleges, acting conjointly, for power to confer degrees in medicine and surgery." This application will not, of course, be proceeded with without opposition. The Society of Apothecaries has been left out in the cold, and the proposed scheme would seriously affect its interests. Opposition is therefore anticipated from that quarter, and also from some of the teaching universities. It is understood that the new faculty will be designated the University of Westminster, and that the degree will carry with it the title "Doctor of Medicine."

* *

Bad Spirits. We recently referred to the consumption in Scotland of methylated spirit as a substitute for whisky. In Edinburgh the spirit is known as "Leith whisky," but the consumption of it there is much less than in the West of Scotland, where it is not only bought from methylated-spirit dealers for consumption, but is also mixed with other spirits and flavoured so as to simulate the national beverage. This latter nefarious practice is followed by "shebeeners" (persons who retail spirits in unlicensed premises). A correspondent of the *Glasgow Daily Mail* has made inquiries regarding the source of the liquor sold by the shebeeners, and has found that it is supplied by certain publicans. The spirit sold by them is of a highly impure nature, and is known as "Berlin spirit." It comes principally from Hamburg, and one firm of that city exports puncheons of it every week to Glasgow. The price of this spirit, which at its greatest strength contains 75 per cent. of alcohol, is only 10*d.* per gallon carriage paid. The Excise duty here is 1*s.* At this strength it should stand easily three-quarters of a gallon of water to the gallon, or thereabout, so that for 1*s.* 10*d.* the publican has 1 $\frac{3}{4}$ gallon, or 56 gills—about 2 $\frac{1}{2}$ *d.* a gill, or quarter. This is sold to the shebeener at 12*s.* a gallon. The spirit is "blended" carefully before being sold, and brought below proof strength. Three samples recently examined show 53.56, 57.52, and 64.76 per cent. of proof spirit. Commenting on two samples examined by him the City Analyst says:—"Both samples showed distinct indications of the presence of methyl alcohol. The quantity was not large, but sufficient to confer a slight flavour, and to render them to some extent unsuitable to be used as beverages." Regarding another sample, Mr. C. M. S. Aikman, F.C.S., reports that it smelt strongly of methylated spirits. A careful test for the same revealed considerable traces. There was also present in small quantity an oily or resinous substance, the exact nature of which he was unable to determine. The whisky was unsuitable for drinking purposes. The consumption of this spirit—especially on Sundays, when the public-houses are closed—is, unfortunately, very large, and the interference of the Excise authorities is much required.

* *

Shop Hours. The *Western Druggist* (Chicago) in referring to Sir John Lubbock's Shop Hours Regulation in America. Bill, and the correspondence upon it in this Journal, says:—"From THE CHEMIST AND DRUGGIST we learn that great interest is manifested in the Bill by all classes of druggists in England. From a vigorous correspondence in its columns, participated in apparently by the metropolitan as well as the shop-keeper on the island of Skye, the majority by far are heartily in favour of the Bill, which will soon come up for passage. It would perhaps promote a spirit of resignation by our British brethren were they acquainted with the number of hours the American pharmacy keeps open—from 7 A.M. to 11 P.M. is a fair average in the larger towns and cities—or 16 hours, and that daily, Sundays only excepted, when one or two extra hours are appropriated. In England the complaint is great because the time is from 8 A.M. to 10 P.M.—and in most instances 9 P.M.—with only

fractional service on Sundays. Truly, American pharmacists have greater need of a philanthropist for their emancipation than their kindred in other lands!"

* *

Chemists' Association. The second quarter of the present session of this Association commences on the 12th inst. with a musical and social evening in the Association's rooms at 103 Great Russell Street, W.C. These social gatherings will be held fortnightly during the quarter, and will include the annual dinner in the Holborn Restaurant, on March 16. Papers on the following subjects will also be read:—"The Pharmacognosy and Chemistry of Calabar Beans," by Peter MacEwan, F.C.S.; "The Wellers," by C. F. Rideal; "Pharmaceutical Soaps," by C. Thompson, F.C.S.; "Sanitation and Sanitary Legislation," by W. G. Blackham; "Notes on a Tour in Scotland" (illustrated by lantern slides), by W. Baxter, jun.; "Ipecacuanha Wine," by F. C. J. Bird; "Analysis of Urine," by J. E. Saul; and "The Substitutes for Quinine," by T. S. Dyson (vice-president).

* *

Failures in 1886. Mr. Richard Seyd's statistics of failures for the past year show that during the year 5,714 were announced in the United Kingdom, of which 533 are classed (by Mr. Seyd) under financial, wholesale, and manufacturing branches of trade, and 5,181 among retail traders, professional men, builders, publicans, working-men, &c. The total number of failures recorded for the past ten years (1877 to 1886 inclusive) is as follows:—11,022, 15,059, 16,637, 13,147, 12,005, 11,019, 10,599, 4,394, 5,089, 5,714. The drug trade for the past ten years figures as shown below:—

	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886
Wholesale ..	20	41	30	18	17	9	35	11	6	9
Retail ..	76	96	96	95	62	72	61	28	22	34

Thus, although the scoring is rather heavier against this year than it has been since the new Bankruptcy Act came into operation in 1884, it still appears that not more than about 1 in 300 on the register was forced to formally acknowledge insolvency during 1886.

* *

The Bedford Beer Case. Dr. Stevenson, the Public Analyst for the borough of Bedford, has resigned that position, and the Bedford Town Council have quite properly accepted his resignation. Dr. Stevenson says he wanted to see what action the Council would take respecting some of Mr. Taylor's statements, but finding the Council disinclined to express reprobation of the alleged sale to its own officer of a poisoned beer, or of the reckless statements of one of their own body, "he cannot consent to remain connected with a body which is so little sensible of what is due to its own dignity and the safety of its officials." When we last heard of this dispute, Dr. Stevenson was threatening in scarcely veiled language to prosecute Mr. Taylor, and it was hardly to be expected that the Bedford Town Council should have spoiled sport by themselves assuming judicial functions. The legal question raised would have been an interesting one, and for the sake of the public there is reason for regretting that Dr. Stephenson's prudence has so inconveniently overcome his valour. It is possible that Mr. Taylor acted irregularly, perhaps illegally; and we understand too that the public analyst cannot be expected to test beer sent to him for every possible ingredient that will dissolve in it. But our fog begins at the point where Dr. Stevenson's assistant was made ill by drinking some of the Bedford beer. If that illness occurred with the particular sample alleged by Mr. Taylor to have been poisoned with a substance "well known in the adulteration of beer" (and this was what Dr. Stevenson at first suggested), surely it was his duty to discover what was wrong with that particular beer. If he did describe as wholesome a sample which had made an assistant ill, the benefit of a public analyst to the people of Bedford is not very obvious. With some idea of this kind, Mr. James Howard gave notice at the Bedfordshire Quarter Sessions on Tuesday last that he should raise the question of the arrangement with the county analyst. If it was the fact that a simple analysis would not reveal the presence of a deadly poison, he thought a retaining fee of fifty guineas per annum was so much money thrown away.

Costly Pills. "Imprimetur" writes from the Hotel Quirinal, Rome, January 3, to the *Daily News*:—"I think it my duty towards the travelling public on the Continent to expose the following carriage charges made by the Italian railways for a small flask of pills sent me from London. I was obliged to pay these enormous charges to get without further delay the small parcel which I urgently required. I add the items of charges, which require no comment except that the parcel was twelve days coming from London:—From London to Paris, 2*fr.* 50*c.*; from Paris to Modane, 2*fr.* 35*c.*; from Modane to Rome, 1*fr.* 85*c.*;—6*fr.* 50*c.* Handling at the Custom House, 35*c.*; duty, 1*fr.* 70*c.*;—2*fr.* 5*c.* First delivery, 35*c.*; second delivery, 45*c.*;—80*c.* Total, 9*fr.* 35*c.*; viz. 7*fr.* 30*c.* carriage for a small flask of pills!" But why did he not have his pills sent by post?

* *

The Sale of Medicines. The Sheffield magistrate who decided that any preparation of tincture of opium might be legally sold as "tincture of opium," and that any soothing preparation might be legally sold as "paregoric," can be shown to have been clearly wrong in his law, at least as far as the first-named article is concerned. He seems to have ruled that, unless the Pharmacopoeia article was specifically asked for, the retailer was not bound to supply a preparation of the strength indicated in that work. But the following extract from an Order in Council dated February 3, 1851, shows that this is not the case:—"At the Court at Buckingham Palace, the 3rd day of February, 1851. Present, the Queen's Most Excellent Majesty, in Council. Her Majesty doth therefore strictly require, charge, and command all and singular apothecaries and others, whose business it is to compound medicines, or distil oils or waters, or make other extracts within any part of Her Majesty's Kingdom of Great Britain called England, Dominion of Wales, or Town of Berwick-upon-Tweed that they and every of them immediately after the said *Pharmacopoeia Collegii Regalis Medicorum Londinensis* shall be printed and published, do not compound or make any medicine or medicinal receipt or prescription, or distil any oil or waters, or make other extracts that are or shall be in the said *Pharmacopoeia Collegii Regalis Medicorum Londinensis* mentioned or named, in any other manner or form than is or shall be directed, prescribed, and set down by the said book, and according to the weights and measures that are or shall be therein limited, except it shall be by the special direction or prescription of some learned physician in that behalf; and Her Majesty doth hereby declare that the offenders to the contrary shall not only incur Her Majesty's just displeasure, but be proceeded against for such their contempt and offences according to the utmost severity of the law. WM. L. BATHURST." The Medical Act of 1862 provided that any Act of Parliament, Order in Council, or Custom relating to any former Pharmacopoeias should be deemed, after the publication of the *British Pharmacopoeia*, to refer to such Pharmacopoeia.

Gazette.

PARTNERSHIPS DISSOLVED.

SCOTT & Co., Marshgate Lane, Stratford, manufacturing chemists; as far as regards W. T. Scott.

SMITH, W. H. M., & RICHARDSON, T. A., Croydon, surgeons.

WICKSTEED & MARTIN, Weston-super-Mare, surgeons.

RECEIVING ORDERS.

HANNAN, FRANCIS JOHN, Woodstock, Oxfordshire, late of Worksop, Nottinghamshire, and Downton, Wiltshire, doctor of medicine.

MUNDIE, GEORGE, Wincheap, Canterbury, surgeon.

ORDER MADE ON APPLICATION FOR DISCHARGE.

BLUETT, PETER FREDERICK WILLIAM, Leek, Staffordshire, physician and surgeon. Unconditional discharge.

FIRST MEETING AND PUBLIC EXAMINATION.

MUNDIE, GEORGE, Wincheap, Canterbury, surgeon. Jan. 13, Bankruptcy Buildings, Lincoln's Inn; Jan. 14, Guildhall, Canterbury.

ADJUDICATION.

MUNDIE, GEORGE, Wincheap, Canterbury, surgeon.

Trade Report.

Note to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

MINCING LANE, January 6.

BUSINESS has now recommenced and is fairly active, a hopeful view of the future predominating. Several articles have risen in value during the week, although the most striking changes are rather the result of successful manipulating than of genuine requirements.

We have received information from Hamburg that four Hamburg borax-refiners, viz.: Chemische Fabrik in Billwärd; Morgenstern, Bigot & Co.; Ertel Bieber & Co.; and Julius Grossmann, together with the Berlin firm of Kunheim & Co., have united for the purpose of selling their produce at a uniform rate. Each firm continues to sell and ship borax as heretofore, but invoices will be issued from one central office, viz. Messrs. Sthamer, Noack & Co., in Hamburg.

Nitrate of Soda is advancing, and *Bleaching powder* steady. It is reported that the two companies of Solvay and Daguin, between whom a lawsuit on the subject of the ammonia-soda process was pending, have come to a private understanding, by which all proceedings are to be dropped, and each side will continue the manufacture of soda by its own process. At first the Solvay Company claimed several millions of francs damages from its opponent.

Citric acid is improving, and the price of *Mercury* has been advanced, carrying all *mercurials* with it. The surprise of the week has undoubtedly been the movement in *iodine*, which article, instead of declining to 2½*d.* or thereabouts, as anticipated in many circles, has again resumed its old price of 9*d.* per oz. This important change is attributed to the renewal of the convention in Chili. *Iodides* have, of course, followed the advance of their principal component, and no *Iodide of Potassium* is procurable on the spot even at 12*s.* *Quinine* is fairly steady, the announcement anent urea-quinine mentioned below having aroused but a limited interest.

The next drug sales, which are likely to be very extensive ones and to offer a large variety of articles, promise to move off well. *Ipecacuanha* and *Musk* are expected to advance. Of the latter article 20 tins Tonquin pods and 15 bottles grain are at present advertised; and 5 packages have, moreover, been imported during the week. Further arrivals of *Senna* have also taken place, but, notwithstanding this, good prices will probably be paid. Oils of *Bergamot*, *Clove*, *Cubeb*, and *Lemon* are dearer. *Strophanthus* has arrived in quantity, and will probably be obtainable at lower rates than those hitherto prevailing.

Sales of drysalteries will be held on Tuesday next; meanwhile *shellac*, *galls*, and *gambier* are fairly well keeping their ground.

A somewhat depressed tone prevailed at the first spice sales of the year, held on Wednesday. *Arrowroot*, *cassia lignea*, *chillies*, *ginger*, *black pepper* and *white pepper* are dull or cheaper; but *cloves*, *mace*, *nutmegs*, and *pimento* have maintained or improved their position. Singapore mail advices state that the new pepper crop is daily expected on that market, and promises to be an abundant one. We hear from Amsterdam that much higher rates are anticipated there for mace and nutmegs, of which the stocks are very small (50 tons nutmegs and 5 tons mace in first hand), while the imports show a constant decline. The prospects of the crop in the Dutch Indies are known to be very bad.

ACID (ACETIC) is now quoted at 3*d.* per lb. for P.B.; 9*d.* for glacial, and 2*s.* 6*d.* for aromatic.

ACID (CARBOLIC).—The liquid acid is quoted at 1*s.* 6*d.* per gall. for crude, and 2*s.* per gall. for 90 per cent. The P.B. article is held at 1*s.* 2*d.* per lb.

ACID (CITRIC) dearer and in good demand. It is stated that the market has been cleared of the available supply, given as 6 to 7 tons, at 1*s.* 11*d.* per lb. At present there are a good many buyers. The reports from Sicily, coupled with the smallness of our stock (about 80 tons), confirm the opinion that there will be a further advance. Concentrated lemon juice has not been quoted from Sicily since last week, when 24*l.* 15*s.* f.o.b. was stated to be the price.

ACID (TARTARIC).—The market is very irregular, the general quotations being 1*s.* 6½*d.* to 1*s.* 6¾*d.* per lb., but some holders state that they are prepared to sell small quantities at 1*s.* 6½*d.* per lb.

ACIDS (VARIOUS).—The following are current quotations:—*Benzoic*, from the gum, 5½*d.* per oz.; *Gallie*, 3*s.* 5*d.* per lb.; *phosphoric*, B.P. 1,500 sp. gr., 1*s.* 2*d.*, diluted, 3*d.* per lb.; *pyrogallie*, English, 1*s.* 9*d.* per oz.

BLEACHING POWDER is unchanged at 8*l.* 5*s.* to 8*l.* 10*s.* per ton, ex warehouse. The Newcastle-on-Tyne quotation is 7*l.* 5*s.*, as compared with 6*l.* at the beginning of 1886, and 6*l.* 5*s.* at the commencement of 1885. This advance is primarily owing to the enlarged and still growing demand. It is this article which yields to the producer his profit, and the relative extent of the make of bleaching powder and of soda products may still be said to define the extent of the profit or of the loss. Many makers on the Tyne have entered into the South Durham salt trade last year, and they have been able to obtain salt in some instances for 30 per cent. less than what was paid by them prior to the development of that salt field two or three years ago. South Durham is now almost able to supply salt for the whole of the Tyne chemical works; and some of the producers of salt are looking for other outlets for their production, whilst the Tyne-side firms in the salt trade in South Durham are enlarging their output. As yet, the reduction in the cost of the raw materials has been insufficient to compensate the chemical makers for the reduction in the selling price of soda products, but there has been the advantage of an increase in the price of bleaching powder to an extent which is very remarkable, and which has been the sheet anchor of the Tyne.

BORAX.—We call attention to the association which has been formed between borax refiners in Germany. The association now quote best refined crystals in 8-cwt. casks at 30*l.* per ton c.i.f. to any port of the United Kingdom. *English* crystals are held at 31*l.* to 32*l.* per ton, but we do not hear of any business beyond the former rate. Our cablegram from New York reports an advance in America.

CAMPHOR.—*Refined* bells are quoted by the makers at 11½*d.*, flowers at 10½*d.* to 1*s.* 0½*d.*, and tablets at 1*s.* to 1*s.* 4*d.* per lb.

COCAINE firm, at 1*s.* 2*d.* per gram for *English*, in bottles, and 1*s.* for *German*.

IODINE.—The Chilean producers have, it is said, renewed their agreement, which expired with the end of last year, and the first result of this policy was the advance of iodine to the old price of 9*d.* per oz., to the entire surprise of the bulk of the trade. There were, indeed, some apprehensions of a coming change, and on Tuesday nothing could be bought under 6*d.* per oz. on 'Change, but so sudden and sharp an advance was certainly not anticipated. There are, of course, all sorts of rumours current regarding the future of the article, and many think that the price will shortly exceed 1*s.*

IODIDE OF POTASSIUM, which was quoted at about 7*s.* 3*d.* before, has now been advanced to 12*s.* for immediate delivery, at which price, however, little, if anything, is obtainable. Some makers quote 13*s.* 6*d.* for immediate, and 12*s.* for future delivery.

MERCURY.—The price has been advanced to 7*l.* 8*s.* 6*d.* by the importer. A fraction of that price is quoted by second hand holders. The general opinion appears to be that 8*l.* per bottle will shortly be asked by the importer.

MERCURIALS.—The following are the latest official prices of some of the more important preparations:—Calomel

2s. 11d.; corrosive sublimate, 2s. 3d.; mercury with chalk, 1s. 1d.; mercurial ointment, 1s. 10d.; mercurial pill, 1s. 11d.; red precipitate, 3s. 2d.; white precipitate, 3s. 1d.—all per lb. Owing to the advance in quicksilver, however, all mercurials are quoted 1d. dearer at the close.

MORPHIA is still quoted at 5s. to 5s. 6d., according to brand.

QUININE.—We understand that Messrs. Howards & Sons are prepared to book small orders for "Urea-Quinine," but they will give no quotation for the preparation. The quinine market does not appear to have been much affected by the announcement, and prices remain unchanged at 2s. 8d. and 2s. 6d. for English, 2s. 5d. for French, and 2s. 3d. for German quinine. It is said that an offer of 2s. 4½d. for Pelletier's make has been refused; second-hand holders of German quinine quote 2s. 1½d. to 2s. 2d. per oz.

SODA.—During the year 1886 the competition between the ammonia processes and the Leblanc process has shown no signs of lessening, though combination may minimise it in this country. But the pressure of low price will prevail in one way or another, and must force down in the end the production, whilst those low prices should stimulate consumption. The tension of 1885 has been less oppressive in 1886, but it still remains unquestioned. The production of chemicals is less, and more diversified, and that diversity is likely to be increased in the coming year. On the London market soda ash is quoted at 1½ per degree landed; bicarbonate at 7l. 5s.; caustic cream, 8l.; white, 60 per cent., 8l. 5s. to 8l. 10s. per ton. Crystals have maintained the last quotations of 2l. 11s. in London and 2l. 5s. on the Tyne.

SODA (NITRATE).—The producers in South America have continued their combination for reduced production, for the first quarter of 1887, fixing the rate at 40 per cent. of producing power, or equal to 600,000 tons per annum, against 450,000 tons during the past year. The extreme depression in agriculture, and the doubts entertained of the stability of the combination render the future of the article very uncertain; but, even with the low range of freights, the prices now ruling for distant delivery are unremunerative to a large number of the producers, an export duty of more than 2s. 6d. per cwt. being still levied by the Chilean Government.

At Liverpool a steady business has been done at 9s. 3d. per cwt. on the spot, and 9s. 3½d. to 9s. 7½d. per cwt. for forward delivery, according to position. The London spot price is 9s. 1½d. to 9s. 3d. per cwt.

VARIOUS CHEMICALS.—We now quote:—Carbonate of ammonia, resublimed, 11d. per lb.; tartar emetic, 1s. 3d. per lb.; subnitrate of bismuth, B.P., 7s. 3d.; subcarbonate of bismuth, B.P., 7s. 11d.; commercial cyanide of potassium, 1s. 2d.; and oxide of zinc, B.P., 1s. 9d. per lb. Rochelle salts, 104s. per cwt.

CONCENTRATED JUICES.—Mr. Daniel Magnus, of 3 Cross Lane, E.C., has sent us the following statistics of imports of lemon and bergamot juice from Sicily into London and Liverpool:—

	1883 Pipes		1884 Pipes		1885 Pipes		1886 Pipes	
January . .	367		325		213		112	
February . .	720		541		933		115	
March . .	470		510		451		265	
	1,557		1,376		1,597		492	
April . .	476		579		656		182	
May . .	375		611		211		90	
June . .	183		430		58		98	
	1,034		1,620		925		370	
	2,591		2,996		2,522		862	
July . .	228		189		272		207	
August . .	224		280		75		96	
September .	81		44		65		162	
	533		513		412		465	
	3,124		3,509		2,934		1,327	
October . .	62		219		100		138	
November .	50		138		114		281	
December .	171		228		102		94	
	283		585		316		513	
	3,407		4,094		3,250		1,840	

CUTCH.—It is stated that in Rangoon there is no cutch of good quality available, and that supplies are arriving very slowly.

GUINEA GRAINS.—The demand has greatly diminished lately, and at Liverpool, which is the principal market, 18s. 6d. to 19s. 6d. has been accepted by holders.

MUSK.—At present 20 tins *Tonquin* pod and 13 bottles *grain* musk are advertised for sale on January 13, but only a small part of this is probably of good quality. Five packages have arrived this week. It is thought that the article is likely to improve its position further in the auctions.

QUILLAYA BARK.—In Liverpool the price has been advanced by holders, who now require 19l. per ton. This advance has apparently had the effect of checking the demand, only a few tons having been sold at the advance.

SENNA.—So far, 34 packages *Alexandria* and 200 bales *Tinevelly* senna have been advertised for the next drug sales. The present values are: *Alexandria*, second to fine selected, 1s. to 1s. 9d.; broken leaf, 7d. to 10d.; *Tinevelly*, good to fine green leaves, 8d. to 1s. 3d. common to good middling, 3d. to 7d. per lb.

SHELLAC.—Small sales of second orange (TN mark) for February–April shipment have been made at 51s. per cwt. Calcutta reports, dated December 14, state that European orange is entirely neglected, and that holders are anxious to realise, even at a decline. In native leaf and in good and fine button lac large transactions have been made at lower rates.

OIL (CASTOR).—Liverpool reports state that although good seconds Calcutta still offer on favourable terms, values have once more given way, for want of support from buyers, spot selling at 2½d. to 2½d. per lb., including KB 2 at 2½d., and forward delivery, at 2½d. to 2½d.

OILS (ESSENTIAL).—*Bergamot* firmer. *Clove* dearer, at 7s. per lb. for English drawn. *Lemon* made an advance of 9d. per lb. early in the week, in consequence of reports from Sicily. Since then a good business has been done, the closing quotation being 5s. 9d. per lb., with every appearance of a further advance.

OILS (VARIOUS).—*Cocoonut*, quiet at 26l. 5s. to 26l. 10s. for Ceylon, and 37l. 10s. for Cochin. Crude *Cotton-seed* oil is slightly lower on the spot, 16l. being quoted in London, and 15l. at Hull. Refined oil, 17l. 5s. to 17l. 2s. 6d. at Hull. *Linseed* oil steady; London, 20l. 5s. to 20l. 10s.; Hull, 19l. 12s. 6d. to 19l. 15s. *Oliver* oil quiet at London and Liverpool. On the latter market the following prices are quoted: 37l. to 38l. for Seville and Malaga; 36l. 10s. to 38l. 10s. for Neapolitan; 37l. 10s. to 38l. for Taranto; and 34l. to 34l. 10s. for Smyrna. In America, it is said, the consumption this season is unusually active, and it seems that the demand is larger than ever before known. During the ten months preceding December the amount of olive oil brought into the United States exceeded the same period last year by about 100,000 gallons, and the increase during the balance of this year will no doubt be larger in proportion. The difference between Italian and Spanish grades is not so prominent as formerly, but the popular demand continues to be in favour of Spanish oil. *Palm* oil is steady in London, at 23l. 10s. to 24l. for fine Lagos. At Liverpool the article is very firm; sales about 100 tons, including Lagos at 22l. 5s.; old Calabar and Cameroons at 21l. 15s. per ton, transit. American *Petroleum* has touched 5½d., but closes at 5½d. on the spot. It is thought in many quarters that the knowledge that the trade have bought so little for the springs months may induce holders to raise the price again. Russian oil has been in good demand, fluctuating with American, the only drawback to this oil competing at American prices being the lesser value of the barrel, although it is precisely of the same value to seed-crushers as a barrel with its original American brands unobliterated. *Turpentine* firm at 27s. 6d. for American spirits on the spot, 27s. 9d. for January–April.

WAX (CARNAUBA) is slowly selling at say 32s. per cwt. for ordinary grey. Fine yellow wax is held as high as 50s. per cwt.

ARROWROOT flat, at 1½d. for ordinary *St. Vincent*, and 2½d. to 3½d. for *Natal*. Australian arrowroot sold well,

50 bags *Queensland* being disposed of, commencing at the low price of $\frac{3}{4}d.$ per lb., but closing at $1d.$ per lb.

CASSIA LIGNEA still sells at 26s. for good, but broken stuff has been realised, without reserve, as low as 19s. to 19s. $6d.$ per cwt.

CHILLIES.—The interest manifested in this article is on the wane, and only 86 bales out of 319 offered for sale were disposed of at lower rates, viz., 34s. $6d.$ per cwt. for fair *Zanzibar*.

CLOVES.—*Zanzibar* are very firm, at 1s. $0\frac{1}{2}d.$ per lb. In public sale yesterday none were offered. *Penang* cloves have made further improvement, 1s. $2\frac{1}{2}d.$ per lb. being the price paid for a single lot. Reports from Holland complain that London is monopolising the trade in cloves. Large quantities were formerly placed on the Amsterdam and Rotterdam markets from the Dutch colonies, but at present the article finds its way to Singapore, and from there to London. Only 30 tons arrived in Holland last year, of which 6 tons still remain unsold.

CLOVE-STEMS are selling at $2\frac{1}{2}d.$ per lb.

GINGER.—*Cochin* easy, with small sales, at 13s. $6d.$ to 24s. per cwt. for ordinary lean and scrapings, and 31s. to 34s. for wormy part cut. Parcels of *Jamaica* and *Japan* ginger were offered, but not sold.

MACE held at high rates; 2s. $6d.$ per lb. has been paid for bright *Penang*.

NUTMEGS dearer and in good demand. In sale *Penang* were sold, partly without reserve, as follows:—(76 to 90) 2s. $9d.$ to 2s. $3\frac{1}{2}d.$; (140 to 152) 1s. $7d.$ to 1s. $6d.$; *Java*, limed (75 to 77), 2s. $6d.$; *Tranacore* (80 to 150), 2s. $7d.$ to 1s. $3d.$; *West India* (78 to 108), 2s. $6d.$ to 2s.; (111 to 139) 1s. $1\frac{1}{2}d.$ to 1s. $5d.$ per lb. The market closes at a further advance.

PEPPER (BLACK) without animation. A fair quantity was offered at auction, but only 20 bags *West Coast* were disposed of at $7\frac{1}{4}d.$ per lb.

PEPPER (WHITE) rather lower. No sales of the *Penang* and *Singapore* varieties were made, but the prices quoted in our last report would not now be obtainable; 139 bags *Stam* sold at 1s. $1d.$ per lb., a decline of $\frac{1}{4}d.$ per lb. since our last.

PIMENTO is in brisk demand, and although a large quantity was offered for sale, prices were well maintained, ordinary damaged realising $2d.$, dull to fair $2\frac{1}{4}d.$ to $2\frac{1}{16}d.$ per lb.

THE AMERICAN MARKETS.

NEW YORK, December 24, 1886.

THE drug market is without any material alteration since last report; business—as is usual at this time of the year—is rather dull, the wholesale houses being mostly occupied with the annual stock-taking, book-balancing, &c. The market is steady, and stocks are held with confidence.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can therefore see at a glance the course of this market compared with their own.

BALSAMS.—A small arrival of Maracaibo *Copaiba* was promptly bought for Bremen at full value, 35c. (1s. $7d.$); Maranham is in very short supply, and still quoted at 38c. (1s. $8\frac{1}{2}d.$), a small lot of Carthagena, very dirty, half water, and apparently adulterated, could not find a buyer at 33c. (1s. $6d.$), and was shipped to London. *Peru* is neglected at \$1.10 (4s. $9d.$) for a direct import. *Canada* can only be had in a small way at 33c. (1s. $6d.$) in barrels.

BARKS.—*Angostura* is quoted 12c. ($7d.$) from first hands; *Sagrada*, very firm at 7c. ($4d.$); *Canella* and *Cascarilla* are reported in short supply. *Jamaica Dogwood*, very scarce, 20c. (11d.); *Simaruba*, only small quantity left, price nominally 15c. ($9d.$).

BEANS (TONQUIN).—The holder of the large stock of *Angostura* is very firm at \$1.50 (6s. $6d.$); small lots from outside holders can be had at \$1.40 (6s. $2d.$). *Paras* are in small supply, and quoted 40c. (1s. $10d.$) for fair dark with some foxy.

COCAINE (MURIATE).—The manufacturers have made no alteration in their quotations, although an advance is looked for; crystals in bulk $\$6$ (26s.) per oz.

CUBEES.—The principal holder here has withdrawn his stock from the market, which is nominally \$1.50 (35l.) for jobbing quantities. There cannot be much here.

LEAVES.—The market is quite bare of good quality Huanoco *Coca* leaves. Large arrivals from Hamburg took place, but they are not offered, being for manufacture. Second-hand holders quote 38c. (1s. $9d.$) in a small way. The stock of light-green Truxillo leaves is in the hands of one holder, who quotes 20c. (11 $\frac{1}{2}d.$). *Damiana* are scarce at present, price 25c. (1s. $2d.$). *Jaborandi*, no stock.

OILS (FIXED).—Newfoundland *Cod-liver* is not inquired for. *Cottseed*.—Supplies are accumulating, but being under firm control the market is steady at 38c. (25l.) for prime summer-refined. *Lard* is firm at 52c. (33l.). *Sperm* in strong demand for England, bleached winter-refined quoted 80c. (54l.).

OILS (ESSENTIAL).—*Aniseed* has been very active, large transactions spot and to arrive reported at \$1.70 (7s. $6d.$). *Cassia* is also in better demand at 57 $\frac{1}{2}c.$ (2s. $7d.$), closing at 60c. (2s. $8d.$). *Pennyroyal*.—Very cheap, and in large supply at 75c. (3s. $3d.$). *Sassafras* is getting scarce, and will, it is thought, be dearer; small quantities are offering at 38c. (1s. $8\frac{1}{2}d.$), but large parcels are kept away from the market. *Spearmint*.—Very scarce at $\$6$ (26s.). *Wintergreen*, in competition with the artificial from Germany, is easier at \$2 (8s. $6d.$) in tins.

OIL OF PEPPERMINT.—During the week about 100 cases H. G. Hotchkiss changed hands at private figures, but thought to be about \$3.55 (16s. $3d.$), the market being \$3.60 (16s. $6d.$). The stock of this brand is small, and any large demand would send the price higher. Bulk oil is neglected at present; prices range from \$2.75 (11s. $6d.$ net) for doubtful Western oil to \$3.15 (13s. $3d.$) for guaranteed pure Wayne county.

POTASSIUM BROMIDE is meeting with fair inquiry for export again at 32c. (1s. $4\frac{1}{2}d.$).

ROOTS.—*Golden Seal* is very firm at the recent advance, 24c. (1s. $1d.$). *Jalap* is dearer; sales have been made at 12c. ($6\frac{1}{2}d.$), and now higher prices are demanded. *Senega* is still very cheap, but meets with no attention. *Serpentaria* can be had "to arrive" at 34c. (1s. $9d.$).

SPERMACETI.—The makers made a slight concession in the price, and large transactions have resulted, to London about 300 boxes. The market is now 42c. (1s. $9\frac{1}{4}d.$).

QUININE SULPHATE.—Owing to the slackness of demand some holders appear more anxious to push off part of their stock, so that the market presents the appearance of temporary weakness. German is offering from second hands at 51c. (2s. $2d.$). The large dealers and operators do not share this feeling, but look forward to a gradual improvement after the turn of the year.

SABADILLA SEEDS.—Sixty bags arrived from South America; an offer is wanted for them.

SARSAPARILLA (HONDURAS).—Large transactions continue, sales for the week being close on 150 bales, mostly of the first-class brands; indeed, these are so cheap now there is no great inducement to try the inferior grades, and buyers are evidently availing themselves of present low figures to lay in good stocks. The J. L. Truxillo and Eagle and Snake receive the preference at 30c. (1s. $6\frac{1}{2}d.$).

AMERICAN CABLEGRAM.

NEW YORK, January 6, 1887.

BALSAMS.—Our market has become unsettled by large arrivals of *Tolu* in 10-lb. tins, and lower rates are anticipated.

BORAX.—Holders of concentrated Californian borax refuse to sell except at an advance.

JALAP.—Owners of this article, who lately quoted 13c. (equal to $7\frac{1}{2}d.$ per lb. London terms) for good heavy dark *Vera Cruz*, have withdrawn their supply from the market and are working for an advance.

DRUGS IN 1886.

Messrs. Reynolds & Sellers, of 3 Mincing Lane, E.C., have sent us their annual review of the London drug market, from which we abstract the following:—

ALOES.—The market has been overstocked with all descriptions, especially common qualities, and prices generally have been in buyers' favour; the statistical position remains unchanged. *Barbadoes.*—A few lots of very old import, both in gourds and boxes, have from time to time sold at fair rates and on a par with Curaçao of similar quality; recent arrivals from the West Indies are classed as Curaçao. *Cape.*—Have been unusually depressed, partly on account of their plentiful supply, also owing to the low value of good ordinary Curaçao. In January, fine hard bright realised 29s. 6d., improving during February–March to 33s. 6d., and subsequently to 34s. in May, when on heavy arrivals the price gave way, gradually falling during the summer and autumn to 25s., closing, however, at 26s.; fair to good ditto, 22s. to 24s.; dark drossy soft, 10s. to 17s. 6d. *Curaçao.*—Arrivals of both boxes and gourds have been on an extensive scale, quality has been very poor, and low prices have resulted. The stock of fine old livery is small and sells at full rates. *Socotrine.*—There has been a good demand for all consignments, which have been rather larger than last year. *Hepatic.*—*Zanzibar.*—The market has been well supplied with both tins and skins; steady rates have been paid for good quality in tins, but skins show a decline of 10s. on the year. *East Indian.*—Moderate supplies have come to hand, but have realised 10s. to 20s. less than current rates ruling last season.

BALSAMS.—*Canada* has been in moderate request at easy rates; sales were made in the spring at 1s. 4d., but rather more is now asked. *Copaiba.*—Maranhão, after remaining depressed for many months, has recently been in demand on American account owing to failure of supplies from the South, and an important advance has occurred. *Pará,* *Maracaibo,* and *Carthagená* are worth 1d. to 2d. discount. *Peru.*—There has been very little life throughout, in fact it is some years since it has remained so low and lifeless for so long a period. *Tolu.*—Opening nominally at 1s. 9d., was forced at auction during January to 1s. 5d., and in the early spring to 1s. 2d. A good business was done in the autumn up to 1s. 5d. per lb., at which price some large sales were made, and at which there are still a few sellers.

BEANS.—*Calabar.*—Early in the year sales were made at 3½d. to 4½d. Owing to low prices ruling for some time importations ceased, and stocks became diminished, hence, on a demand springing up during August–September, higher prices were at once asked and paid, sales being effected up to 10d. The demand having fallen off there are now sellers at 9½d. *Tonquin.*—*Pará.*—There has not been much variation in the value of this article; some small consignments were sold at easy rates during the summer, but present prices are about on a par with those ruling twelve months since. We quote—bold dark crystallised, 1s. 9d. to 2s. 6d.; inferior, part foxy, 1s. 3d. to 1s. 8d. *Angostura.*—Quiet but firmly held without change, at 6s. to 6s. 6d. per lb.

BORAX.—During the greater portion of the year has been depressed, owing to large receipts of Californian and Italian, the fall in the autumn being 6s. from opening rates, prices here being less than import cost. Recently, an advance having been paid in California the market has been active, and the decline for the most part recovered.

CARDAMOMS.—The supply from Ceylon continues on the most liberal scale, notwithstanding the low prices that are realised for all qualities compared with past years, the total shipments this season being 236,000 lbs., against 150,000 lbs. in 1885 and 23,000 lbs. in 1882, when shipments of importance first commenced. Owing to the advance in coffee it is suggested in some quarters that more attention will be paid to its cultivation, and less to the minor articles, of which this would be one; hence we may hope for a falling-off of shipments if prices continue to decline. The changes in values have been continuous according to the supply. In January an important decline of 6d., or about 20 per cent., took place at the first drug sale, but later on this was recovered, March prices being equivalent to opening rates. During May–June prices again gave way, the finer sorts 4d. to 6d., the com-

moner kinds 6d. to 9d., recovering about half the decline in the autumn and closing steadily.

CUBEBS.—The high rates current during the past three years are well maintained, consumption being quite equal to supply, and any apparent scarcity is at once taken advantage of to raise prices. Several parcels mixed with spurious berries have come on the market, and the best parcels available contain a large percentage of stalks; hence, great care is necessary in making purchases at the moment.

ERGOT OF RYE.—A speculative inquiry early in the year forced up prices considerably, but the improvement was not long sustained, holders being unable to realise, and new arrivals were disposed of at declining rates, until the advance was not only lost, but a decline of 5d. per lb. established on opening prices.

GUM AMMONIACUM.—There has been more business doing in this article during the past year; importations have been of greater magnitude, consisting largely of good whitish drop, though rather small; lately also nearly 100 cases of old stock have been brought out and disposed of; prices have been exceedingly moderate and a large proportion has gone into consumption. Stocks at the close continue heavy. Prices since January are 10s. to 20s. lower.

GUM ASAFCETIDA.—There has been less demand this season, notwithstanding that our imports are 500 cases short; this is accounted for by the Americans holding large stocks, and not coming on this market for supplies so freely as heretofore; hence at the first important sale in May, when 602 cases were catalogued, price gave way 10s., and late in the autumn a further fall of 5s. occurred.

ELEMI.—Early in the year several small lots of good quality were disposed of at 11s. decline, viz., from 25s. to 31s. 6d. for fair to good white, but as the year advanced and supplies became more concentrated, higher prices were obtained and the decline partly recovered. Our present quotations are on a par with those ruling in January last, viz., good to fine white, 32s. 6d. to 40s.; yellow drossy to fair, 10s. to 25s. per cwt.

MYRRH.—There has been a steady demand for all good and fine qualities, and prices have remained without noticeable change throughout the year. Our stock, which appears large, includes a considerable proportion of Bdellium gum almost unsaleable. We quote dark to pale bold selected, 6l. to 8l.; pickings to siftings, 70s. to 85s.; ungarbled Aden sorts, 90s. to 100s.

OLIBANUM.—The low prices which ruled for some years previous to 1884–85 gradually told on the imports, which continue to show a falling-off, and this year have fallen to nearly one-third of what they were in 1881–2; as a consequence full prices have been obtainable, and the advance of last year maintained.

TRAGACANTH.—The advance noticed at the close of last year was not sustained, and during the spring the market gradually eased until June, when the finer sorts were selling at 40s. below the highest point; from this time there has been more demand, importers not only not offering, but buying on this side on account of the high rates ruling in Turkey, and the decline was soon recovered, the market closing steady as follows:—*Syrian* firsts, 10l. to 10l. 10s.; seconds, 8l. 10s. to 9l.; thirds, 6l. 15s. to 7l. 10s.; common to fourths, 70s. to 6l. *Hog*, 45s. to 75s.

HONEY.—The event of the year so far as regards this article has been the realisation of some 5,000 cases Californian of 1885 import. Such a quantity not only depressed this description but all other kinds; although the parcel was split up and offered at various times of the year, very low prices had to be taken. The quality of several piles was certainly open to question, but on the whole the bulk was fairly good—some portion excellent—and we doubt if such low rates will again rule for some time to come.

IPECACUANHA.—Stocks have been kept at a low ebb throughout the year, and prices as a rule favoured importers, compared with the past two or three seasons. In January good quality, which was selling at 3s. 4d., advanced 6d. during the month, but arrivals came in, and the advance was lost in March–April. There was another rise of 6d. to 8d. in May, but this was not sustained, and during the summer and autumn it was again wholly lost. During the past month

there was again little offering, and as there are orders in the market awaiting execution, we expect higher prices to rule at the next drug sale for the moderate quantity which can then be offered. Present quotations are:—Fair to good bright, 3s. 4d. to 3s. 8d.; ordinary to fair ordinary, 3s. to 3s. 3d. per lb.

JALAP.—Large stocks are held on the continent, and most of the shipments have been directed thence instead of to London, on account of the heavy charges until recently exacted here for landing, &c., &c. Notwithstanding the moderate price there was a heavy fall in the summer, but at the close an improvement has taken place.

MUSK.—Very full rates have been obtained for all fine qualities, and prices at the close show an advance of 12s. 6d. on pile 1 since January. If accounts from China are to be relied on, much higher rates than are now current will rule here during the coming spring, as they are already being paid on the other side, and very little pod musk is either here in warehouse, or on the way.

OILS (FIXED).—*Castor*: Scarcely any life has been manifested on this market, and the trade has been on a small scale during the past year, with prices generally in buyers' favour; fair seconds are fractionally lower, but good white druggists' oil has maintained its value. We quote Calcutta, good to fine firsts, 3½d. to 4d.; fair to fine seconds, 2½d. to 3d.; ordinary, 2½d. per lb. *Cod-liver* has been in ample supply at very moderate rates, and at the close shows a decline of 6d. to 9d. on January prices. *Norwegian*, fair to good pale new, 3s. 3d. to 4s.; yellow to straw, 2s. 6d. to 3s. per gallon. Newfoundland has only met a slow sale at easy rates; yellow to fair palish, 2s. 3d. to 3s.

OILS (ESSENTIAL).—*Aniseed*: Opening nominally at 6s. 10d., a decline to 6s. 5d. took place early in January, in consequence of lower offers to arrive, and a good business was done during the month at this figure; also at 6s. to 6s. 1d. on c.i.f terms. From this point the market became dull with a drooping tendency, and fluctuated between 6s. 2d. and 6s. 3d. during the last half of the year, closing, however, firmer at 6s. 5d. *Citronella*: A speculative demand sprang up in January and several hundred cases were bought up both spot and arrival, commencing at 1½d. to 1¾d., with retail sales at 1½d.; but supplies were too extensive, and the realisation proved disastrous to operators. The market became dull; in the early spring even money was accepted, and a trifle less since, closing at 1½d. per oz. *Cajuput*: There has been a steady demand at easy rates, closing quiet at 3d. decline since January, viz., at 3s. per bottle. *Lemongrass* in steady request at 1½d. per oz. *Peppermint* (American, H. G. Hotchkiss'): The speculative transactions this season have been considerable, and fluctuations often and varied, prices this side being generally below those ruling in New York. The brand closes firm at 16s.; L.B., nominal 15s. 6d. *Japanese* has been rather a drug on the market and not been so freely taken by the trade; some fairly good oil was recently sold in quantity at 6s., marking a heavy decline, but generally more money is required, this being an exceptional sale.

RHUBARB.—This article still suffers from excessive stocks, and as it is non-keeping, very heavy losses have been made, and low prices taken for medium qualities to effect sales; the bulk of the old stock, which has recently been forced at auction, showed signs of decay by worms. Fine sound Shensi sun-dried root maintains its value, and is by no means plentiful; but high-dried, since it began to be forced at auction in the early summer, has fallen 50 per cent. Canton has likewise participated in the decline.

ROOTS.—*Galangal* in excessive supply, several thousand bags having arrived. Present quotation of 7s 6d. shows a decline since January of 5s. 6d., and is now under cost and freight. *Gentian* has met a steady demand, ruling between 16s. and 18s., closing at 17s. *Orris* is without material change; stocks moderate. *Mogadore*, 17s. 6d. to 20s.; *Italian*, 22s. 6d. to 25s. 6d. per cwt. as in quality. *Senega* has been without animation and tended in buyers' favour, opening in January at 2s. 3d.; present prices mark a decline of 4d., viz., 1s. 11d. per lb. for sound root.

LEAVES.—*Buchu*: There has been a plentiful supply of short round; fairly green have realised 2½d. to 3½d., being a moderate price; yellow mixed, 2d. to 2½d.; recently a

parcel of exceptionally fine green made 4d. to 4½d. Long narrow have met a slow sale at 7d. to 10d.; some parcels have been shown, mixed with flowers and stalks, which have much depreciated their value and retarded the sale. *Coca*: Large arrivals both here and in Hamburg have caused easier rates to rule, 1s. being present nearest value for good green fresh import, or a decline of 6d. for the year, although business was done during the autumn below this figure. Recently a demand has sprung up in America, and very liberal shipments have been made thence from European markets generally.

SARSAPARILLA.—All kinds have been in ample supply, and lower rates have been current since January. Heavy stocks of *Honduras* concentrated in New York have kept prices easy on this side, and a decline of 4d. has resulted, closing at 1s. 5d. to 1s. 6d. for good quality. Recently several hundred bales of fair marks have changed hands in New York at easy rates, and now higher prices are looked for. *Lima* has been scarce and readily saleable at 1s. 5d. to 1s. 6d. *Mexican* was in large supply early in the year, and the price dropped from 6½d. in January to 4½d. in April, since when rather better prices have been obtainable, although the demand is slow at 5d. to 5½d. *Guayaquil* has declined 2d. to 3d. on the year, and is still selling at easy rates, viz., 1s. per lb. for good sound root.

SENNA.—*Alexandria*: There has been a much better supply of this description this season, and to effect sales holders have recently had to reduce prices about 3d. on the finer sorts; at the moment there is some quantity offering, and demand is slack. We quote second to first picked, 1s. to 1s. 9d.; broken leaf, 7d. to 10d.; pods, 3d. *Tinnevely*: The crop this year is much larger than last, although still some 1,000 bales short of previous average seasons. As all markets were absolutely bare of stock at the end of the 1885-6 season, new arrivals have been eagerly competed for, and so far have entirely gone into consumption, leaving our stock again unusually small at this time of the year. At the first sale of new leaves early in September there was a want of demand at the extreme rates current during the summer, buyers preferring to await further arrivals, and ordinary to fine fell 2d. to 4d., but as time advanced it became apparent that there would be only a moderate supply, and as consumers were forced to replenish their stocks at all cost, the offerings at each successive sale were in active request at advancing rates, until we close firm within a shade of the highest point, except for leaves under 5d., which were 1d. cheaper at the last sale. Present quotations are:—Good to fine bold green, 8d. to 1s. 3d.; good middling, 5½d. to 7d.; inferior to fair, 3d. to 5d. per lb.

DRYSALTERIES IN 1886.

ASPHALTUM.—The market has been quite stationary, so far as any fluctuations in value are concerned. *Cuban* has met a slow sale at 22s. 6d. to 24s. *Syrian*.—Throughout the year there has been a moderate demand for fine, with second quality very dull of sale. Stocks are chiefly held by one importer, and prices are maintained. We quote—fine, 37s. to 38s., and seconds, 30s. to 32s. 6d. per cwt.

COCHINEAL.—This article is gradually recovering its position, mainly owing to the low rates current during the past four years having checked cultivation; to-day our stock is once more within a reasonable quantity, having decreased 1,000 bags during the year. Consumption is barely sustained, prices, however, have been fairly steady throughout.

GALLS.—*China*.—The market is steady, present quotation being 62s. 6d. *Japan*.—A few small consignments have realised from time to time a few shillings under the value of China. *Turkey*.—The fluctuations have not been so wide as China, and considering the large arrivals prices have been well maintained. The imports, some 4,000 bags more than last year, have gone freely into consumption, leaving our stock only slightly increased. Fine blues are scarce. Present prices are—good blues, 60s. to 62s. 6d.; blue and green, 55s. to 57s. 6d.; green and white, 50s. to 55s. per cwt.

GUM ARABIC.—The present large stock of gum held in London alone, amounting to some 1,500 tons, might well frighten some holders, and induce consumers to soon expect moderate prices, were it not known that the bulk of this

stock is common *East Indian*, and that of really good quality our warehouses are not overstocked. With the exception of Ghezirah very little Turkey gum has been received this year; the Barbary crop has been an entire failure the same as last season, and the only good qualities from which our wants have been supplied have been Senegal and fine East Indian. *Australian* early in the year was worth 75s. to 80s. for good fair part glassy, but on the arrival of new crop during May-June (which was fairly plentiful) prices gave way 25s.; this decline, however, was gradually recovered, subsequent arrivals realising more money, until at the close quotations are nearly on a par with those current in January, with only a few packages offering in second hands. *Barbary*.—Only a few packages have been received this season; fine gum has realised 5*l.* 10s. to 6*l.* 10s., and a little of fair quality is still obtainable at the former figure. *Turkey*.—Very few sorts have been received; buyers have in all cases restricted their wants within the smallest possible limit, and taken Senegal and fine Amrads as a substitute where practicable. A fall of 50s. to 60s. was established for a short time during May-June, but present prices are now at the highest point yet touched, with very little available, viz., good pale soft sorts, 12*l.* to 12*l.* 10s.; ordinary to fair, part hard, 10*l.* to 10*l.* Picked—Stocks have been and still are extremely limited, and quotations very uncertain, viz. about 13*l.* to 25*l.* for thirds to firsts. *Ghezirah* and *Talca* are the only descriptions of Egyptian which have arrived in larger quantities, especially the former, during the past six months; although prices have been reduced 30s. to 40s. the demand is slow, and only retail sales can be effected. Present prices are 90s. and 80s. per cwt. respectively for good quality.

GUMS (VARNISH).—*Animi*.—Zanzibar.—Since the autumn there has been more demand, which has been freely met by holders, owing to the better prices realised, viz.—medium to bold, pale and amber, 14*l.* to 15*l.*; ditto, ditto, part reddish mixed with weak, 12*l.* 10s. to 13*l.*; pale pea and bean, 7*l.* to 8*l.* 10s.; red ditto, 5*l.* to 5*l.* 10s. *Demerara*.—Small consignments have come to hand, and met a steady demand at current rates. At the moment there is little available. *Madagascar*.—Only small supplies have been received, and met a good demand. *Manilla*.—Hard.—Good sorts scarce, and inquired for; picked and scraped gums have been in moderate supply, and mostly met a good competition, selling at full prices compared with opening rates. *Soft*.—Very little has been shipped here direct, but an unusually large supply has been received in Holland, and thence found its way to this market. The price fell 2s. 6*d.* during the year, and it is now selling at a very low figure. *Sierra Leone*.—Natural has been in ample supply both here and in Liverpool, but with a good demand at present moderate prices has found buyers throughout at steady rates compared with a year ago. *Cleaned*.—There has been little change in value, if anything prices have been rather in sellers' favour. We quote—Firsts, 1s. 0*d.* to 1s. 1*d.*; seconds, 8*d.* to 10*d.* per lb. *Damar*.—Our present large stock is mostly made up of chips, siftings, and dust, and is therefore rather somewhat misleading, the available supply of good quality being within reasonable limit and firmly held. *Batavian*—good, 87s. 6*d.*; siftings and chips, 27s. 6*d.* to 37s. 6*d.* *Singapore* in moderate supply. We quote—Fair to good specky sorts, 65s. to 82s. 6*d.*; yellow dusty, &c., 40s. to 55s. per cwt. *Kowrie*.—The imports this year are less than half those of 1885, and stock reduced some 1,000 tons. Present quotations are—fine dial, scraped, 9*l.* to 12*l.*; dial and amber ditto, 6*l.* to 7*l.* 10s.; medium to bold pale brown to amber ditto, 80s. to 100s.; good hard brown ditto, 65s. to 75s.; ditto medium half scraped 52s. 6*d.* to 60s.; ditto coated part soft, 37s. 6*d.* to 45s.; good brown coated to pale chips, 40s. to 65s.; dust, 15s. to 30s. per cwt. *Sandarae* has been extremely difficult of sale, as importers have frequently pressed parcels on the market.

SHELLAC.—The total shipments from the port of Calcutta to all parts of the world amount this season to 85,500 cases, compared with 94,000 cases in 1885, thus showing a falling-off in supply for the first time since 1882. With present low range of prices, consumption continues to show a marked increase, and we estimate the past season to have been 79,000 cases compared with 75,000 during the previous year. The falling-off in supply has been more noticeable during the close of the past Calcutta season (closing October), thus leading us to suppose that the low prices paid to the natives

during May-July did not give them much encouragement to produce more than was actually necessary to keep their factories going, also the quantity sold forward, so far, of new season's make is much less this year than formerly (which should reduce our landings in the spring), there not being that desire to press prices below a certain base, which point is a moderate premium over present spot value, and deters many buyers from operating, who first wish to see a better spot demand and stocks reduced; this most natural desire now shows some signs of fulfilment, our stock which stood in January at 57,000 cases increased to 65,080 in June, the largest quantity ever held at one time, has since gradually fallen to 60,000 cases. Compared with January last we close at the following decline, viz., fine orange, 6s.; second ditto, 7s. 6*d.*; garnet, 8s.; and button, 7s. 6*d.* on dark to 13s. on fine. We quote—Fine orange, DC, BSLS, H in diamond, ASSL, at 68s. to 76s. per cwt.; second ditto, B in octagon, VSO, SD in circle, 59s. to 62s.; ditto, ditto, DG, TN, GA, 49s. to 51s.; gold, ditto, HSL, A in double triangle, nominal; native ditto, ditto. Garnet, AC, BCB, OCC, AT, 47s. to 50s.; ditto, block, 45s. to 46s. Button, good seconds to fine blood, 55s. to 61s.; fine thirds to medium seconds, 48s. to 52s.; low to good thirds, 40s. to 46s.

COCA LEAVES IN HAMBURG.

Mr. Julius Grossmann, of Hamburg, has sent us an interesting review of the movement in coca leaves on the Hamburg market in 1886, from which we abstract the following:—

The Hamburg stock of coca leaves in first hand was as follows:—

	Jan. 1, 1886.	Dec. 31, 1886.
	Kilos.	Kilos.
Bolivian leaves	5,680	2,300
Peruvian „	1,910	4,600
Truxillan „	6,300	5,700
Total	13,890	12,600

The following figures represent the imports and deliveries in 1886:—

	Arrivals	Deliveries
	Kilos.	Kilos.
Bolivian leaves	22,750	24,620
Peruvian „	35,050	34,570
Truxillan „	29,310	28,810
Total	87,110	88,000

About 300 bales (representing perhaps 20,000 kilos.) passed Hamburg in transit. In the beginning of the year, and again towards its close, business in coca leaves has been very brisk. The United States have been the most important purchaser lately, and the execution of the orders from that quarter caused the article to advance from 35 to 60 per cent. Truxillo leaves are looked upon with suspicion in many quarters, and are commonly denominated “spurious coca”; but recently this variety has apparently found more favour with manufacturers. The bulk of the deliveries went at once into consumption. The lowest quotations of the year were touched in September, owing partly to the accumulation of stock, which then reached 40,000 kilos., partly to the development of the exports of crude cocaine from South America, and last, but not least, to the forced sale of a large parcel at about one-half the estimated market value.

The result of the diminished value caused an almost entire cessation of shipments from South America, and at present no further supplies are known to be on the way.

The extent of the consumption of coca in Bolivia and Peru may be inferred from the statement, made on good authority, that only about one-tenth part of the total crop is exported.

The future supply of leaves depends upon the development of the manufacture of crude cocaine in South America. The price last paid in Hamburg for crude cocaine equals 7*½**d.* per gramme, a figure which appears to be remunerative for the Peruvian maker. It is said that several German makers of cocaine have resolved in future to use only the Peruvian crude cocaine, and have made contracts for the delivery of that substance extending over several months. The recent arrivals of crude cocaine show a purer article than the first consignments.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

The Shop Hours Bill.

We give a few specimens of opinions lately received, and hope to print more next week.

A *Subscriber* (Chesterfield) writes:—"In this town all the chemists closed with great regularity at 7.30 P.M., and on Saturday 10.30 P.M., but some new businesses having commenced to keep open later, the others were compelled to do the same in self-defence—a case of the minority ruling the majority.

"I am not altogether in favour of legislation which curtails the liberty of the subject, but prefer being curtailed by the Government rather than by my neighbours."

256/62. *G. P. P.* (London) cannot help remarking that he thinks it a most unjust Bill under present circumstances. It interferes materially with one's liberty. Many retailers depend upon business when the "stores" are closed. The Bill does not describe what "open shop" means. How when the shop is "closed" and the side door is open? One may be worked harder and in fouler air with the shutters up than when they are down. Would such an article as Ridge's food be looked upon as a medical appliance?

3/45. *C. B.* (Nottingham) writes:—"Though my hours of business will not be affected by the Bill (having adopted 8 A.M. to 8 P.M., and 10 P.M. on Saturdays, years ago), the advantages I have derived from these earlier hours are such that I am desirous that others also may have the benefit which would accrue from earlier closing.

"It is, in my mind, all sentiment the idea of interfering with the liberty of the subject. The public is one of the hardest and most tyrannical masters any individual ever had to serve, and if the hours of labour were fixed, and it is known that our shops close at reasonable hours, the public will be compelled to come to us earlier instead of leaving us till the last moment."

255/35. *A. J. E. E.* (Thornbury) writes:—"Permit me to add my protest against the 'Shop Hours Bill.' Speaking generally I think there are already, in these hard and cutting times, quite enough 'laws and by-laws' to hamper our business movements without this iniquitous Bill. I am no advocate for oppression in any sense—quite the contrary; but I have lived long enough to understand that very often fresh Acts of Parliament mean interference with your rights and privileges, and not infrequently, directly or indirectly, your pocket.

Short Hours (Dublin) states:—"The Dublin hours generally run from 8 or 9 A.M. to 7 or 8 P.M., and later on Saturdays. I consider these hours very long, and think they might be

easily shortened. I work my own business personally, and open at 8.30 A.M. and close at 7 P.M. sharp, and I can assure you it is rarely I sell anything after that except medicines urgently required, and I would even close earlier than that but that people might say I was getting neglectful, as the houses about fifteen minutes' walk from me and only five minutes by tram do not close until 8 P.M., and one of them 9 P.M. What they keep open for I do not know. I suppose it must be that Pat shall not get the last penny if Jack can keep it from him. I hope that instead of a Home Rule Bill we shall get an Early Closing Bill, and thereby obtain a boon for the hard-worked pharmacist, the patient assistant, and the wearied apprentice. Your correspondents who call the Bill coercion, vexatious, un-English, madness, &c., I consider are really the tyrants, and I am sorry to hear such expressions used towards the proposed Bill outside of a lunatic asylum."

260/41. *C. W. D.* (Nottingham) thoroughly approves of the general preamble of the Bill. The reason he says "No" is because of closing at eight. If 8 P.M. is made the closing hour it might be ten or fifteen minutes before he could clear the shop; the authorities would watch for this, and he would be in trouble. This seems to be a difficulty not so easy to get over as it appears on the surface.

250/33. *R. H. C.* (London) considers that tradespeople as a class require protecting against one another, being unable to protect themselves, as one man often causes a whole district to keep late hours. The law only can adjust this matter, and until it does the stamina and intellectual development of a very large and important class of the community will suffer. There is no reason why tradespeople should be expected to be at the public call for fourteen hours a day when city men are content with seven, and even the petted working-man contends for eight. We are our own enemy if we blindly decline to assist in our own emancipation. If the law should ever settle this matter, very soon things would settle down, and he is convinced that very few indeed would suffer, and in any great reform that must inevitably be the case. It is a question of emancipation, to bring about a real "liberty of the subject" and a vastly-increased store of intellectual and physical wealth to the nation at large, to say nothing about an increased zest and ability for business during the prescribed hours.

259/24. A *Subscriber* states:—"I am thoroughly opposed to the proposed Bill, and the very suggestion of such legislation for the drug trade, in my opinion, shows the ignorance of its promoters. It will check legitimate trade, will press very unevenly, especially entailing hardship upon those who can least afford it, and to whom it means ruin, without doing anybody good. Many businesses well within the specified time at some parts of the year are at other seasons a little later, which cannot be avoided."

2/55. *Meridian* (Greenwich) believes that not only in the interests of health and prolongation of life, and of necessary recreation and cessation from labour extended to most unreasonable hours, but also from the point of view of a great check to immorality, the Bill would be of vast service. If it were the fashion to keep open till 2 A.M., just as many people would be out and about as at midnight now. The matter is entirely in our hands, and any reasonable plan that might be adopted would be secured by unity amongst ourselves. Loss, of course, there could be none, and experience has amply proved that what is dawdled over to please the public for twelve to sixteen or seventeen hours could just as easily be accomplished in eight or twelve, and with as much good to the public as ourselves. His experience is that very few need come after 8 P.M. A few simple remedies kept in the house would be all they would need unless in case of serious illness, when the doctor must be called in. People would not think of closing the day without food in the house—why without medicine?

256/14. *T. J.* (Kilmarnock) is entirely opposed to this Bill. Should it become law it means certain ruin to many of our profession. It may do well enough in some of our large cities, but in country towns it will never do.

Chemists' Prescribing.

We have received the following letter from one of the censured chemists referred to last week. We understand that a similar letter has been published in a Cheltenham paper:—

SIR,—At the inquest held last Monday week at the Cheltenham workhouse to inquire into the circumstances attending the death of Lucy Ridler, I was severely censured by the coroner, and I shall be greatly obliged if you will give me space in your paper to ventilate what I consider an official blunder, as well as a very curious anomaly. Mr. Hinder called upon me, saying his servant was very bad and in bed with a cold, and I prescribed the necessary remedies to relieve her, and I believe any medical man at the time would have adopted a similar treatment. Now Mr. Coren blamed me for sending medicine to the poor girl, while at the same time he considered Mr. Hinder had done all in his power in the case. This, I think you will admit, is queer logic, for if the girl's master had gone to a doctor instead of coming to me I should have escaped the inquiry altogether; can you reconcile this? It is quite beyond my comprehension. On Monday last the coroner was acting in his official capacity, but if he would descend from his dignified and exalted position and become an ordinary individual, I have no doubt I should be able to convince him my offence was not of so heinous or grave a character as he so assiduously represented it to the jury. I can only say (and I am sure this is a very general opinion) that if chemists were to discontinue prescribing, there would be abundance of occupation for coroners and their deputies. Mortuaries, workhouse boardrooms, and such places as are generally used to hold inquests in would be in constant demand, for where one death occurs through the chemist prescribing, hundreds would die of neglect. It is exceedingly difficult to know how to act. In case of sudden illness in the street the usual thing is to run to the nearest chemist and ask what should be done; if he declines to interfere and the person dies he is told he is inhuman; but should the chemist administer a dose in kindness and an inquiry follow, doubtless Mr. Coroner would consider it his duty to read him a suitable lesson and hold out threats of penalties, and make a tremendous flourish of Acts of Parliament, &c. I should like to quote a few facts if you will kindly allow me. Some years ago a young man while passing my door broke a large blood-vessel and vomited a great quantity of blood. I had him brought inside, and administered acid astringents with a sedative and employed other usual remedies, in the meantime sending in every direction for a medical man; but long before I succeeded in obtaining one I had arrested the bleeding and made the poor fellow comfortable, placed him in a cab, and conveyed him home to his apartments, and sent my messenger to Gloucester to inform his friends of what had occurred. Now, for my services and expenses out of pocket I did not charge a farthing, and yet, had he died in my house, I suppose I should have had a tremendous scolding from the coroner. Again, some years since a neighbour came crying to me, begging I would at once accompany him to his house as he was in fearful trouble, but did not tell me the cause of his grief. I at once went with him, and was conducted into a dark room and told I was in a death-chamber. I desired him to send for a doctor and communicate with the police. At the inquest on the body a juvenile fledgling medical man thought proper to give his opinion about chemists visiting patients, when such a thing had never occurred. Under the circumstances what did his gratuitous advice go for? Why simply nothing. Some years back a butcher's assistant met with an accident and cut his thigh very badly, severing the femoral artery. I was instantly called to the scene and, seeing at once the dangerous nature of the wound, I immediately sent a fly to fetch a surgeon with as little delay as possible. The fly returned empty, the message being the doctor would come at once. I then went myself, saw the surgeon and described the case. He said he would come directly, but he did not come. He sent his assistant, and the man died from loss of blood. I could quote numbers of such cases, but this is not necessary. When I said I hoped I should profit by the warning Mr. Coren gave, I did not wish him to infer I should never prescribe again, but should take every precaution to avoid a similar occurrence happening again; for depend upon it so long as medical men continue to make up their own

medicines and send from surgeries, chemists will continue to prescribe for all ordinary ailments of a simple character.

I remain, yours truly,
Cheltenham, December 30. S. WOODWARD.

The Chemical Experiments.

SIR,—I beg to thank your three correspondents for pointing out the omission in the "Fire-eater." The string should be smouldering inside the tow when placed in the mouth. I also note that you have omitted to indicate the manner in which the paper should be folded in the "Magic Fernery" experiment. The MS. label gave directions to fold backwards and forwards as in making a paper fan.

I remain, yours truly,
Southport, January 5. T. D. WRIGHT.

8/22. *Erica*.—A little nitrate of potash acts as a preservative of senna preparations, and may be used for the compound mixture.

If you buy the Chesebrough Company's vaseline there does not seem to be any reason why you should not sell it as vaseline with your own name on the label.

1/22. *Cochineal*.—*Liquor Cocci*.—Boil for twenty minutes in a porcelain dish 1 oz. of coarsely-powdered cochineal and 1 oz. of carbonate of potash with 7 oz. of water, then add gradually 1 oz. of potash alum and 1 oz. of cream of tartar (previously mixed). When effervescence has ceased, filter, washing the residue first with 2 oz. of proof spirit and then water to 8 oz. Dissolve in the filtrate $\frac{1}{2}$ oz. of common salt and 6 oz. of sugar, afterwards making up with water to 16 oz.

Oil of Sprigs.—Possibly oil of spike is meant; this is oil of turpentine coloured with alkanet. *Oil of Bricks*.—Linseed oil coloured with alkanet is given for this.

20/35. *J. J. B.*—Gout and Rheumatic Pills.—

Ext. colchici acet.	..	..	..	gr. xi.
Ext. coloc. co.	..	..	..	gr. 48
Ferri et quina. cit.	..	..	..	gr. 24

Fiat massa et div. in pil. 24. "One a dose, at bedtime."

Lime Juice and Glycerine.—This correspondent wishes the following difficulty solved:—

Liq. calcis sacch.	..	..	..	1 oz.
Liq. calcis	..	..	..	7 oz.

Mix and add—

Ol. amygd. dulc.	..	..	..	8 oz.
Ess. limonis	..	..	..	q.s.
Ess. bergam.	..	..	..	q.s.

The above makes a good mixture, but sometimes after keeping a little while it goes pinky, almost red. Why is it, and what will prevent it?

21/47. *Index*—*Iodised Sarsaparilla*.—Potassii iodidi, 3j.; dec. sarsae co. conc. 3iss.; aquae, 3vj. M. Dose: A tablespoonful. Three to five minims liq. arsenicalis is sometimes added, but the plain mixture is preferable for retail trade. *Ink for Rubber Stamps*.—Dissolve a drachm of violet or crimson aniline in 4 drachms each of methylated spirit and water, and add 1 drachm each of treacle and glycerine to the solution.

20/55. *R. Thomas*.—Communicate with Mr. Benjamin Bryan, 1 Victoria Street, S.W., the secretary to the Association for the Suppression of Vivisection.

2/112. *A. B.*—*Cyclostyle Ink*.—The only ink resembling this for which we can give a formula is one published in the *American Druggist* for ribbon ink (such as is used for stamping railway tickets):—Take vaseline or petroleum ointment with high melting-point, melt it by heat and incorporate with it as much lampblack as it will take up without becoming granular. Remove the mixture from the source of heat, and while it is cooling add to it a mixture of equal parts of turpentine and benzine until it is of the consistence of fresh paint.

DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

An Alkaloidal Precipitate.

What decomposition takes place in the undermentioned prescription on the addition of liq. strychnine? The mixture assumes a yellow colour:—

Liq. Donovan.	..	..	..	..	3j.
„ strychninæ	..	..	..	..	3j.
Syr. ferri iodidi	..	..	..	..	3j.
Glycerini (q.s)	..	..	..	..	3ij.
M. Ft. mist.					

WELSHMAN. (14/122.)

[Strychnine and other alkaloids are precipitated by alkaline iodides, and especially by mercuric iodide. The precipitate in this case is an iodo-hydrargyrate of strychnine.]

Quiniae Suph. in Pills.

SIR,—Mr. Tabor's query calls for another reply, the previous ones being antagonistic. I say Mr. Corder is right in excipient and quantity of same. I have dispensed thousands with no other excipient, but without fingering them; nor have I found it necessary to use any powder. If Mr. Corder will grease his lightning rapidity he will have no difficulty in making two dozen at a shot, as is my custom.

Anerley, January 3.

L. TOMPSETT.

Examination Prescriptions.

SIR,—I see by your valuable paper that you invite candidates to send their prescriptions given to dispense at the Minor examination. I presented myself in December, and was "ploughed" over the following prescription. I have tried it several times since, but cannot get a satisfactory emulsion:—

Ol. ricini	..	..	..	..	3iss.
Mucil. acac.	..	..	..	..	3j.
Syrup.	..	..	..	..	3ss.
Tr. zingib.	..	..	..	..	℥xv.
Aq. ad	..	..	..	..	3iss.
M. Ft. hst.					

To be taken in the morning.

Plumbi acet.	..	..	..	..	gr. xxx.
Opii	..	..	..	..	gr. iij.

M. Ft. pil. [xii.]

One every night.

Could you assist me in it? By so doing you will oblige,

Yours obediently,

DENS. (21/71.)

[The best result is obtained by using fresh mucilage. Rub the oil and mucilage together in a mortar for a few minutes, then add the syrup; again rub well, next add the tincture, and lastly the water, drachm by drachm. A fairly good emulsion is thus obtained, but it separates.]

Is it Difficult?

SIR,—Will you kindly give me your opinion of the following prescription:—

Acid. salicy.	..	..	..	..	gr. xv.
Pot. bicarb.	..	..	..	..	gr. xv.
Syr. aurant.	..	..	..	..	3j.
Aq. ad	..	..	..	..	3ss.
M. Ft. mist. ad 3vj.					

3ss. every two hours for four doses; afterwards, every four hours.

Whether I was justified in calling the mixture incompatible? Whether, in the event of the doctor living close by, I was justified in calling his attention to it? And lastly, how would you suggest it to be prepared?

Yours respectfully,

LABOR OMNIA VINCIT. (21/73.)

[There is no difficulty with this prescription. The prescriber evidently means to give salicylate of potash. Dissolve the bicarbonate in a little hot distilled water, add the salicylic acid and stir until effervescence ceases.]

LEGAL QUERIES.

Farmyard (9/19).—There is no law in this country which requires that a youth must pass the Preliminary examination before apprenticeship. (2) To use again the medicine stamp which has been on a bottle from which you have dispensed would be a fraud on the revenue which might be punished by a term of penal servitude. All the medicines your name may be obtained without medicine stamps for dispensing purposes. The Board of Inland Revenue have allowed this concession for certain foreign preparations, but they do not allow it, as far as we know, for any British medicine.

Dentist (2/19) asks:—"Can a registered chemist have written up in a private window 'Dental Surgery,' where a registered dental surgeon comes weekly, without infringing the Dental Act?" [If the registered dentist makes himself responsible for all the work done, that is, if he is *bonâ fide* the principal in the dental business, the description seems to be in order. But it might lead to trouble if it is intended to suggest that the chemist is also a qualified dentist. An unregistered person must not use "any name, title, addition, or description implying that he is registered under this Act, or that he is a person specially qualified to practise dentistry." We cannot say whether a court would consider the course proposed came just within or just without the line of legitimacy.]

5/18. *Chemists* puts this case:—B registered in 1882 the title of a certain perfume which he had lately introduced. A had made and sold a perfume under a similar title since 1854, but did not know of the registration by B. In 1886 A sold his business to C, and then B threatens C with legal proceedings for infringement of his registered title. What is C's position? [Assuming that the uninterrupted use of the title by A since 1854 can be satisfactorily proved, it does not appear that he (or his successor C) has much to fear from B. He can wait the attack of this latter, or, if he please, he can take the offensive, and apply to the court for the removal of B's mark from the register. When B's mark has been on the register five years, he will be in a stronger position; but even then there does not appear to be reason to apprehend that a court will refuse to hear and be guided by a reasonable defence. Before taking any steps, however, we hope our correspondent will consult a solicitor or patent-agent familiar with this business.]

19/63. *R. R.*—Your label is ingeniously constructed, and would very likely be proof against Inland Revenue attacks. But we cannot tell what view the authorities at Somerset House might take, nor how a court might decide if the question came up for trial. Send two labels to Somerset House and ask their opinion; on receipt of their answer you will much oblige by communicating it to us.

23/54. *J. H. E.*—We cannot give legal advice on subjects altogether distinct from pharmacy. Yours is evidently a case in which you must be guided by a local solicitor.

P. Glyc. Co. c. Zingibere.

SIR,—I notice in your legal queries a remark on the above, and beg to send a word of encouragement to the inquirer respecting it.

There is not much fear of any legal issue being tried when the above is supplied—it is so very much preferred to the German sort, as introduced to the B.P. 1885. I have prepared it for sixteen years, and used to keep both kinds for a long time, but have now only that with ginger. My modification of the Ph. Pruss. consists in omitting fennel and adding $\frac{3}{4}$ oz. ginger to the B.P. quantity. Now that Dr. Oxley has called attention to a similar kind in the *Lancet*, but with a small portion of aniseed, I hope it will be prescribed in order to test it thoroughly.

Yours truly,

THE DOCTOR'S COOK. (20/57.)

[We do not doubt that the formula for Pulv. Glycyrrh. Co. can be improved, but a chemist is not legally justified in supplying any substitute when the British Pharmacopœia article is asked for, or when an article under the B.P. name is prescribed.]

MISCELLANEOUS INQUIRIES.

5/105. *C. C. P.*—We expect to give you full details in a few weeks.

15/42. *O.*—We find the egg trick satisfactory, if the egg is allowed to remain in the acetic acid for twelve hours. The surface does not become hard and brittle after washing with cold water, but that is not intended. The electro depositing experiment is correct.

19/43. *Albus.*—Brooke's soap, or any other combination of soap and fine sand, will remove **Smoke Stains** from white marble. Finish off with oxalic acid solution, well rubbed in.

Bronze Varnish.—Diamond fuchsin, 10 parts; Hoffman's violet, 5 parts; dissolve in 100 parts of methylated spirit by the aid of a water-bath, then add 5 parts of benzoic acid and boil for five or ten minutes, until the mixture has acquired a brilliant bronze colour. This varnish is said to give a beautiful gloss, but it is the better for a coat of sandarac varnish. To lacquer metal goods the metal is first heated to a temperature of about 70° to 80° C., then coated with a lac varnish.

12/19. *Business.*—**Green Colour for Lard.**—Digest in the melted lard any harmless green leaves, such as cabbage or Brussels sprouts, until the leaves are crisp, then strain and press the leaves.

Stores and Income Tax.

SIR,—Would you kindly inform me if the Civil Service Stores and the Army and Navy pay income tax.

T. A. P. (21/33.)

[We believe they do.]

22/10. *C. E. L.*—Silver marking-ink stains may be removed from linen with solution of cyanide of potassium.

Variorum.

SIR,—A correspondent asked for particulars for poisoning moles. The following answers very well indeed:—Strychnia made into as strong a solution as possible with any acid. I have found sulphuric acid answer best. Worms are dipped into the poison and laid in the runs of the moles.

Another correspondent asks how to fix artificial hair for theatrical purposes. I have found gum mastich dissolved in chloroform or ether answer admirably.

I am naturally pleased to see my name among the awards, and heartily endorse the highest place being given to Mr. Wright for chemical experiments. As you invite further suggestions about experiments, I send the following:—Phosphorus dissolved in bisulphide of carbon, when poured on a sheet of paper, fires spontaneously as soon as the carbon bisulph. has evaporated. Its dangerous nature prevented me sending it among my list of experiments, but in some hands it would undoubtedly be safe enough. Thanking you for so enlarging the awards,

I am, yours faithfully,

Bedale, January 1.

R. A. BELLAMY.

Information Wanted.

[Replies to the following requests are solicited by Correspondents of THE CHEMIST AND DRUGGIST.]

5/57.—Formulæ for tar and mallow soaps.

23/123. Machine for making French perles. Maker wanted.

21/28. What is it?—*Enquirer* writes:—"A few days ago a friend, during some experiments, drew something across each side of the head of a hen which caused the hen to fall on its back apparently quite lifeless, remaining so for the course of five or ten minutes. The substance had the appearance of a root, but he would not tell me what it was. He remarked that its effect was peculiar to hens. Could anyone inform me what it could be?"

NEW COMPANIES.

J. M. COPELAND AND Co. (LIMITED).—This company proposes to trade in photographic apparatus and chemicals, optical and similar goods, and for such purposes will enter into an agreement for acquiring the business carried on by Mr. J. M. Copeland. It was registered with a capital of 10,000*l.* in 5*l.* shares.

TRADE MARK OWNERS' MUTUAL PROTECTION ASSOCIATION (LIMITED).—This association has been registered as a company, limited by guarantee to 5*l.* each member, for the protection and registration of trade marks and designs in the United Kingdom and abroad, and to promote legislation in respect of the same. The subscribers are: Mr. C. H. Curtis, 74 Lombard Street; Mr. J. T. Skinner, 30 Milk Street; Mr. C. Cheswright, sen., 1 Wharf Road, City Road (managing director of Betts & Company, Limited); and Mr. H. C. Stephens, Aldersgate Street.

MILES WILLIAMS & Co. (LIMITED).—This is the conversion to a company of the business of varnish, paint, and household speciality manufacturers carried on by the firm of Miles Williams & Co., at 50 Brasenose Street, Bootle, and at Scholesbridge, Wigan. Capital, 25,000*l.*, in 1*l.* shares, with the following as first subscribers:—Henry Parkinson, 56 Brook Road, Bootle Lane, post office clerk; Robert Wright, Garston, schoolmaster; J. Russell Lee, Farnworth, Widnes, painter; Thomas Lancaster, 43 St. John's Road, Bootle, chemical manufacturer; Miles Williams, 5 St. Alban's Road, Bootle, varnish manufacturer; J. H. Davies, 25 Lord Street, Liverpool, solicitor; and J. G. Croft, 41 Upper Warwick Street, Liverpool, commission agent.

J. & J. THOMPSON & Co. (LIMITED).—The business of a patent-medicine vendor, drug merchant, herbalist, and general storekeeper, carried on by Mr. Luke Crabtree, trading as J. & J. Thompson, at 192 Manchester Street, Oldham, has been registered as a limited liability company. Capital, 2,000*l.*, in 5*l.* shares, with the following as first subscribers:—J. W. Everson, Rochdale, butcher; Luke Crabtree, Oldham, patent-medicine vendor; J. Gaskill, Norden, near Rochdale, fuller; D. Grey, Rochdale, butcher; J. Spencer Proctor, Habergham, near Burnley, mill manager; E. Gaskill, Norden, near Rochdale, warper; A. Crabtree, Rochdale, jeweller. Registered without special articles.

DEATHS.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

ABBEY.—On December 18, Mr. Joseph Abbey, Nottingham, chemist and druggist. Aged 50.

HODGKINSON.—On December 27, Mr. George Frederick Hodgkinson, Waddon. Aged 69.

HUCKLEBRIDGE.—On December 28, Mr. James Marwood Hucklebridge, Ebury Street, London, pharmaceutical chemist. Aged 69.

MARTIN.—On Christmas Day, 1886, Alderman Henry Gilham Martin, St. Albans, pharmaceutical chemist. Aged 60. Mr. Martin served his apprenticeship and carried on a successful business as a chemist and druggist in the Market Place, St. Albans, till 1876, when he retired, selling his stock and goodwill to Mr. A. E. Ekins. Mr. Martin was mayor of St. Albans in 1869, and served in many other honorary municipal offices.

PARRINGTON.—On November 24, Mr. William Parrington, Batley, chemist and druggist. Aged 44.

ROYLE.—On December 8, Mr. Samuel Royle, Manchester, chemist and druggist. Aged 53.

SEDGWICK.—On December 22, Mr. Samuel Thomas Sedgwick, Bexley Heath, chemist and druggist. Aged 66.

THORBURN.—On December 9, Mr. Henry Thorburn, Bishop Auckland, chemist and druggist. Aged 73.

VOICE AND THROAT.

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Pharmaceutical Improvements.

COMPRESSED CHLORATE OF POTASH TABLETS.

The Compressed Chlorate of Potash Tablets are snowy white, lenticular, and perfectly pure. There is no sugar, paste, or other admixture in them to interfere with the local or general effects of the medicine. By using them the drug is effectually brought in contact with the oral mucous surfaces, and its specific action made certain. In acute sore throat Chlorate of Potash "usually relieves the uneasiness in a few hours" (Cohen). "Typically it acts as a stimulant to mucous membranes" (James). It is "chiefly used to bring about a more healthy condition of the mucous membrane of the mouth and throat, and acts like a charm in follicular stomatitis" (Wood). In spongy, bleeding gums, and ulceration of the gums and adjacent surface, "it cures the dirty-looking ulceration, and heals it in a day or two." "Chlorate of Potash exercises great influence on mucous membrane," says Prosser James, "and has been the means of saving many a life." These Tablets are "infinitely superior to lozenges" (Lennox Brown).

Dr. Brunton says—"Chlorate of Potash is chiefly used to bring about a more healthy condition of the mucous membrane, and to cause ulceration present there to heal up. It is used in stomatitis occurring during nursing, on whatever this depends, in aphthæ, in cancrum oris. It is used in follicular pharyngitis, and has been employed internally and as a local application in cases of croup, diphtheria, and spasm of the larynx."

COMPRESSED CHLORATE OF POTASH AND BORAX TABLETS.

Sir Thos. Watson recommended Borax in the aphthous ulceration which attends the advanced stages of phthisis, and Brunton found it serviceable in cracked tongue. Waring speaks of it as very effectual for hoarseness and clergyman's sore throat, and Ringer advises its use in aphonia from over-use of the voice. Dr. Budd speaks highly of it in diphtheria.

The worth of Chlorate of Potash may be greatly enhanced by the presence of Borax. Borax is proverbially known to quickly relieve hoarseness, irritation of the throat and bronchi, and when taken early to avert a cold. It is considered an excellent antiseptic, correcting perverted oral secretions, cleansing the mouth, and imparting to an offensive breath the wholesomeness of perfect health. It is of the greatest service in "clergyman's sore throat," and proves not

only a preventive of diseases of the nares, throat and larynx, but taken a few minutes before speaking or singing clarifies the voices. The BRITISH MEDICAL JOURNAL says:—"The Wyeth Tablets are manufactured with the utmost neatness and perfection." An excellent way to employ Borax is in the Compressed Chlorate of Potash and Borax Tablets.

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The Voice Tabloids contain COCAINE, Chlorate of Potash and Borax. COCAINE has been largely employed by laryngologists, and is highly valued in many throat affections. It allays irritability of the throat, and tones the mucous membrane of the vocal cords and throat generally. "It relieves also the dysphagia of phthisical laryngitis" (Phillips). Fuller, clearer, richer vocal tones follow at once upon its use. In "clergyman's sore throat" its good effect is immediate and pronounced. The best form in which to employ COCAINE for the voice and throat is in the Voice Tabloids with Chlorate of Potash and Borax.

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In chronic catarrhal states of the mucous membrane of the nose, throat, or bronchi, inhalations of the neutral fumes of the Chloride of Ammonium are almost unequalled. They enable the engorged membrane to free its meshes of inflammatory deposit, and seem to act as a solvent. Deafness due to catarrh has been cured by this vapour. The Burroughs Inhaler is a complete apparatus, and incurs no special trouble in using. It is always ready for use.

"It is the best Inhaler I have ever used, and I think I have tried all the different Chloride of Ammonium Inhalers hitherto devised" (Dr. Franks, Dublin University).

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The benefits to be derived from steam in affections of the respiratory tract are well known. In acute inflammations steam is grateful and soothing, in many throat troubles it is invaluable, and has doubtless saved many a life. It may be medicated as desired, and when it is inhaled the medicament be brought into immediate contact with the affected parts. Codman & Shurtleff's Steam Atomizer is used by many physicians every day. It is easy to prepare, and the steam is often medicated with Hazeline, Pure Terrebene (Burroughs), &c. Da Costa says:—"I know of no instrument that better fulfils its purpose."

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Strophanthus has been found most useful by Prof. Frazer in cases of mitral and tricuspid regurgitation, with lessened urine, anasarca, dyspnoea, nausea, vomiting, and diarrhoea, even with albuminuria, removing all the symptoms; also in mitral stenosis and regurgitation. It is antipyretic, pyrexia occasionally disappearing, and frequently apyretic cases exhibiting a subnormal temperature after taking it. "Sickness and gastro-intestinal disturbance are not produced so frequently by Strophanthus as by digitalis," and no evidences of its accumulation were obtained by Dr. Frazer. Compared with digitalis, it exerts a more powerful action upon the heart, and produces fewer secondary actions, affecting less powerfully the blood vessels. Secondly it increases blood tension, produces diuresis, and reduces temperature.

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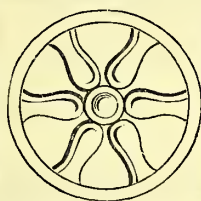
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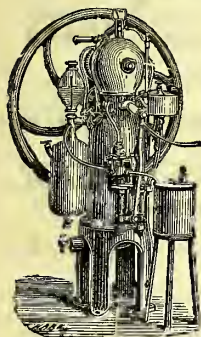
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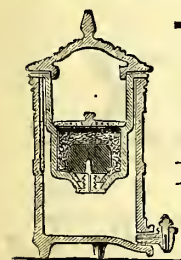
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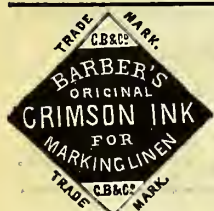
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[Introduced 1855.]

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without altering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.

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" Anisi, " 4/ "	" Cassia, " 4/ "	" Mentli, Pip., " 4/ "	" Rosa, " 8/6 "
" Camphorae, " 4/ "	" Flor. Aurant., " 8/6 "	" Ang., " 6/ "	" Rosa Virgin., " 10/6 "
" Carui, " 4/ "	" Flor. Sambuci, " 8/6 "	" Viridi, " 4/ "	

The above are put up in Bottles of 4 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

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BOTTLES of every description of shape and size, panelled and plain, stoppered and not, also with and without white metal screw tops, at lowest prices. Show and specimen Bottles, Glasses, and Jars in great variety; also Laboratory Glassware. Show and Stock Bottles and Barrels, after the style of Illustrations, in White Glass 1/2, 1, 2, 3, and 4 gallons capacity, fitted with glass stoppers and silvered taps.

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YEATMAN'S

SYR. HYPOPHOSPH. COMP.

Is the STRONGEST and MOST ELEGANT Syrup yet offered.

ONLY CHEMISTS ARE SUPPLIED.

It contains in each fluid drachm—

Hypophosphite of Lime	1 gr.
" " Soda	2 grs.
" " Potassa	1 gr.
" " Iron (Protoxide).....	1 gr.
" " Manganese.....	1 gr.
" " Quinine	1 gr.
" " Strychnine	1/100 gr.

SLIGHTLY ALKALINE.

The composition may be varied to suit buyers. Diluted with an equal bulk of Syrup it possesses the average strength of the advertised Syrups. As HYPOPHOSPHITE, and NOT Pyrophosphate of Iron, is used in this preparation, no inelegant precipitate occurs.

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	containing 25 PILLS	containing 100 PILLS	containing 25 PILLS	containing 100 PILLS	containing 25 PILLS	containing 100 PILLS
Aconitine Crystals (Duquesnel's)	1-500 gr.	7 0	24 0	Hydrastine (White Alkaloid)	1-2 gr.	20 6
Alces Barb. B.P.	1-200 gr.	7 0	24 0	Iodoform	1 gr.	9 0
Alces Dilute (Hall's Dinner)	5 gr.	5 0	16 0	“ and Iron	11 0	39 6
Alces Socotrine, B.P.	5 gr.	5 0	16 0	Ipecac. Powdered	1-4 gr.	5 0
Alces and Asafetida, B.P.	5 gr.	5 0	16 0	“ Comp. (Ipecac and Opium)	5 gr.	9 0
Alces and Iron, B.P.	5 gr.	5 0	16 0	“ and Squill, B.P.	5 gr.	5 0
Alces and Myrrh, B.P.	3 gr.	5 6	18 0	Iron, Arseniate	1-8 gr.	5 6
Alces Nux Vomica	5 gr.	6 0	20 0	Carbonate, B.P.	5 gr.	5 6
Alces	1-10 gr.	5 0	16 0	“ by Hydrogen (Quevenne's)	1 gr.	5 0
Alces	1-4 gr.	6 0	20 0	“ Iodide (Blancard's Formula)	1 gr.	7 0
Alces	1-2 gr.	7 0	24 0	“ and Quinine Citrate	2 gr.	10 0
Alces	1 gr.	11 0	39 6	“ Quinine, and Strychnine	13 6	49 6
Alces Compound	7 0	24 0	Laxative Vegetable (Improved Cath.)	5 6	18 0	
Alces and Strychnine	7 0	24 0	Manganese, Bin-oxide	2 gr.	9 0	
Alces Strychnine and Belladonna	7 0	24 0	Mercury, Bin-Iodide	1-16 gr.	5 0	
Anti-Cholera	2 gr.	7 0	24 0	Proto-Iodide	1-8 gr.	5 0
Anti-Dyspepsia (Fothergill's)	7 0	24 0	Morphine, Muriate	1-4 gr.	5 0	
Aphrodisiac	16 0	59 6	Narcotic Extracts (Brown-Sequard)	1-4 gr.	7 0	
Arsenious Acid	1-50 gr.	5 0	16 0	Nitro-Glycerin	1-100 gr.	9 0
Asafetida, U.S.	1-20 gr.	5 0	16 0	Opium, Powdered	1-50 gr.	7 0
Asafetida Compound, B.P.	5 gr.	5 0	16 0	“ and Acetate of Lead, B.P.	1 gr.	7 0
Atropine	1-300 gr.	7 0	24 0	“ and Camphor	5 gr.	7 0
Blue Mass, B.P.	1-100 gr.	7 0	24 0	Pepsin, Pure Concentrated	1 gr.	9 0
Blue Mass	1 gr.	5 0	16 0	Phosphorus	1-100 gr.	6 0
Blue Mass	2 gr.	5 0	16 0	“	1-50 gr.	6 0
Blue Mass	3 gr.	5 0	16 0	“	1-30 gr.	6 0
Blue Mass	5 gr.	5 6	18 0	“ and Iron	8 0	28 0
Calcium Sulphide	Colocynth and Hyoscy.	9 0	32 0	“ Iron and Quinine	17 0	63 6
Calcium Sulphide	1-10 gr.	6 0	20 0	“ and Nux Vomica	7 0	24 0
Calcium Sulphide	1-4 gr.	6 0	20 0	“ Nux Vomica and Iron	8 0	28 0
Calcium Sulphide	1-2 gr.	6 0	20 0	“ and Quinine	17 0	63 6
Calcium Sulphide	1 gr.	6 0	20 0	“ Quinine, Iron, and Strychnine	17 0	63 6
Calomel, Colocynth, and Hyoscyamus	9 0	32 0	and Valer. Zinc	11 0	39 6	
Calomel Comp. B.P.	5 gr.	5 6	18 0	Picrotoxin	1-80 gr.	7 0
Calomel and Opium	7 6	26 0	Podophyllin	1-8 gr.	5 0	
Camphor and Hyoscyamus	5 6	18 0	“	1-4 gr.	5 0	
Camphor Mono-Bromated	2 gr.	11 0	39 6	“	1-2 gr.	5 6
Cannabis Indica Extract	1-4 gr.	7 0	24 0	“ Comp.	8 0	28 0
Cannabis Indica Extract	1-2 gr.	9 0	32 0	Quinine, Bi-Sulphate	1-4 gr.	5 0
Cascara Sagrada Extract	3 gr.	7 0	24 0	“	1-2 gr.	5 0
Cathartic Compound U.S.P.	5 6	18 0	“	1 gr.	5 0	
Codeine	1-2 gr.	20 6	79 0	“	2 gr.	7 6
Colocynth Comp. B.P.	4 gr.	8 0	28 0	“	3 gr.	10 6
Colocynth	5 gr.	9 0	32 0	“	4 gr.	13 0
Colocynth	5 gr.	9 0	32 0	“	5 gr.	16 0
Colocynth	5 gr.	9 0	32 0	Sulphate	1-4 gr.	5 0
Colocynth	5 gr.	9 0	32 0	“	1-2 gr.	5 0
Conium Compound, B.P.	5 gr.	5 0	16 0	“	1 gr.	5 6
Copaiba Compound	5 6	18 0	“	2 gr.	8 0	
Copaiba Compound	5 gr.	11 0	39 6	“	3 gr.	11 0
Copaiba Compound	1-30 gr.	5 0	16 0	“	4 gr.	14 0
Copaiba Compound	1-20 gr.	5 0	16 0	“	5 gr.	17 0
Copaiba Compound	1-10 gr.	5 0	16 0	“ Comp. (Anti-malarial)	15 0	55 6
Croton Chloral	1 gr.	10 0	36 0	Rhubarb Comp., B.P.	5 gr.	7 0
Croton Chloral	2 gr.	17 0	63 8	“ and Blue Mass	5 gr.	7 0
Cubeb, Oleo-Resin, with Soda	7 0	24 0	Rhubarb, Ipecac. and Soda	7 0	24 0	
Digitalin	1-60 gr.	7 0	24 0	Salicylic Acid	2 gr.	7 0
Elaterine	1-20 gr.	13 0	47 6	“	5 gr.	11 0
Emmenagogue (Mutter's)	5 6	18 0	“ Comp.	16 6	63 0	
Ergotin	3 gr.	16 6	63 0	Soap Comp., B.P.	5 gr.	8 0
Euonymin	2 gr.	16 0	59 0	Squill Comp., B.P.	5 gr.	5 6
Euonymin	3 gr.	20 6	79 0	Strychnine	1-50 gr.	5 0
“ Compound	16 0	59 0	Zinc, Phosphide	1-4 gr.	7 0	
Ferruginous (Blaud's)	3 gr.	6 0	20 0	“	1-2 gr.	9 0
Ferruginous	5 gr.	7 0	24 0	“ Valerianate	1 gr.	8 6

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Obtained by the action of Metallic Zinc on Chloroform and Alcohol.

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COMPOUND ANÆSTHETIC ETHER,

For producing Local Anæsthesia.

In 4-oz., 10-oz., and 20-oz. Stoppered Bottles, 2s., 4s., and 7s.

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ETHYLATE of SODIUM

(Dr. RICHARDSON'S Formula), for removing Nævi, &c. In 3-oz. & 1-lb. Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. &

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Containing Pure Vegetable Ivory Charcoal.

In Boxes, 2s. 6d. each.

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DINNEFORD'S FLUID MAGNESIA



PERFECT IN PURITY AND UNIFORM IN STRENGTH.

The most efficacious antacid and mild aperient for Delicate Constitutions, Ladies, Children, and Infants.

OF ALL WHOLESALE DRUGGISTS.

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Sold by all respectable Chemists, in **LARGE-SIZED** Bottles (the 1s. size containing nearly
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Is a valuable remedy in cases of **SLEEPLESSNESS** and **WEAK NERVES**. Bottles, **1/** and **2/** each.

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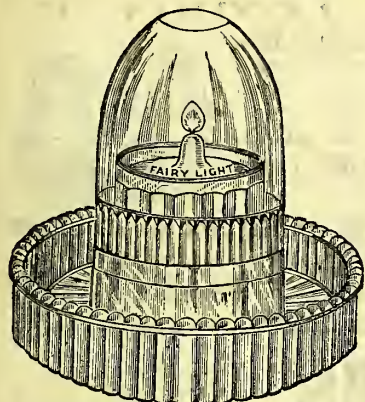
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Low Quotations on application. Delivered at London or Liverpool.

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PRICES ON APPLICATION.



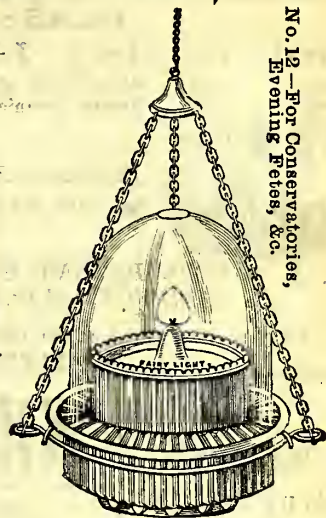
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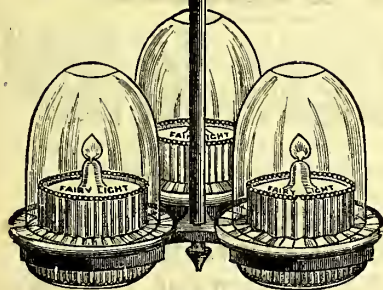


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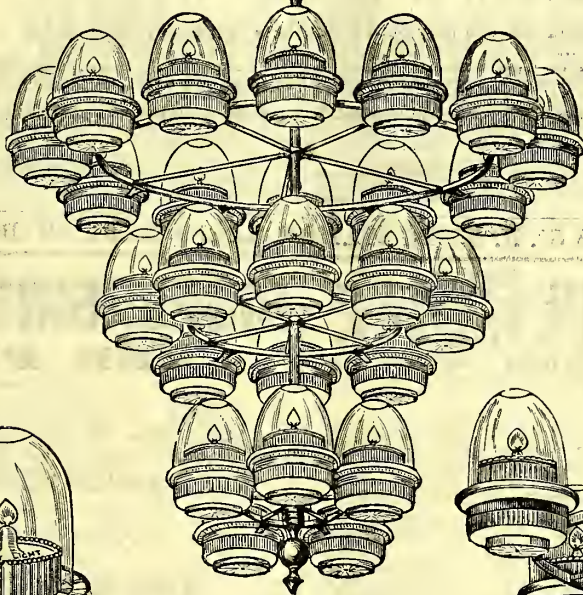
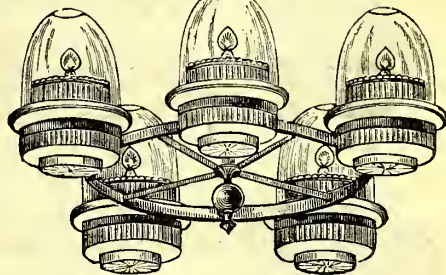


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Evening Fêtes, &c.

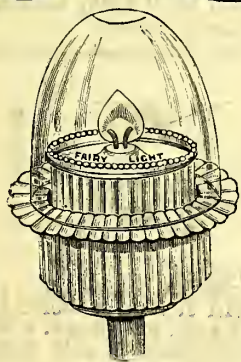
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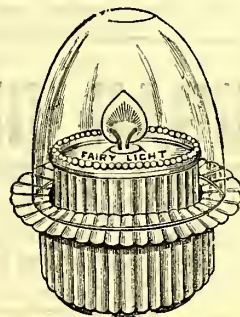
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25-LIGHT CHANDELIER.



No. 14.



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Permanently Restores those
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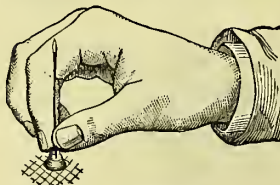
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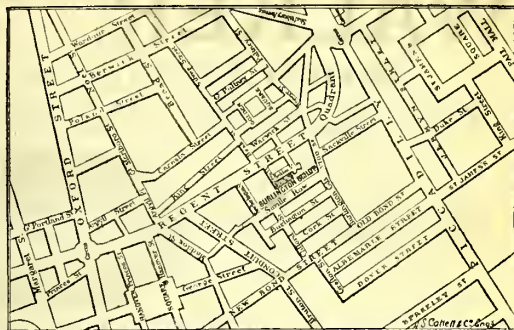
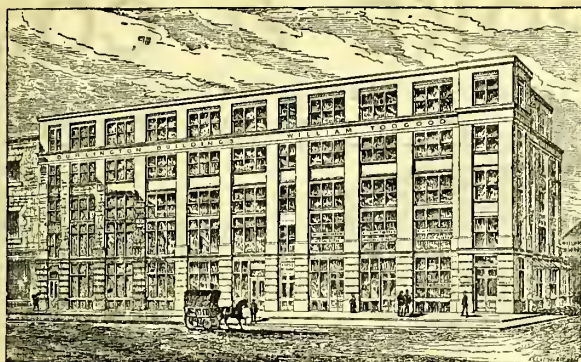


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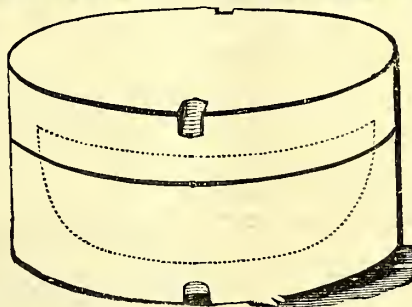
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 HAS REMOVED FROM
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Are claimed to be the most perfect and convenient yet offered to the Trade, and possess the following Advantages:—

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2nd.—The Covers being made quite flat, labels can be affixed with ease, and without creasing.



3rd.—The inside of the Pots being rounded or egg-shape, the contents can be entirely removed without waste.

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PRICES, per gross.

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18/-	18/-	18/-	20/-	22/-	24/-
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I'm going a milking Sir she said:-
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DOG MEDICINES for the Cure of Distemper, Worms, Mange, Eczema, Ear Canker, Rheumatism, and the various other Canine Diseases. Full List and Pamphlet on Canine Diseases, post free.

"COMMON SENSE OF DOG DOCTORING," price 6d. DOG SOAP.

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For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, and swellings in horses; for painting after calving and lambing, and for swollen udders and sore feet. ½-dozen box, 7s. 6d.

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(Manufactured by R. J. JAMES, the Grandson of the Inventor.)

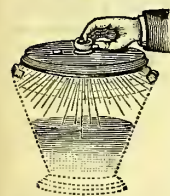
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Observe the Trade Mark.—"A Horse's Head on the top of each Pot, and the signature, R. J. James."

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For Slop Pails, Commodes, &c.
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This cover has a chamber which can be filled with Cond's Fluid or other Disinfectant. By pressing the ball in handle a spray is injected, sufficient to disinfect or deodorise the contents. Sizes—7", 8", 9", 10", 11", 12", 13", 14", 15", 16", 17", 18", 19", 20", 21", 22", 23", 24", 25", 26", 27", 28", 29", 30", 31", 32", 33", 34", 35", 36", 37", 38", 39", 40", 41", 42", 43", 44", 45", 46", 47", 48", 49", 50", 51", 52", 53", 54", 55", 56", 57", 58", 59", 60", 61", 62", 63", 64", 65", 66", 67", 68", 69", 70", 71", 72", 73", 74", 75", 76", 77", 78", 79", 80", 81", 82", 83", 84", 85", 86", 87", 88", 89", 90", 91", 92", 93", 94", 95", 96", 97", 98", 99", 100".

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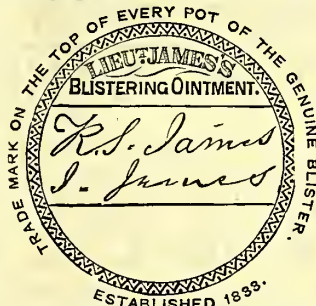
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TIN CANISTERS AND BOXES,

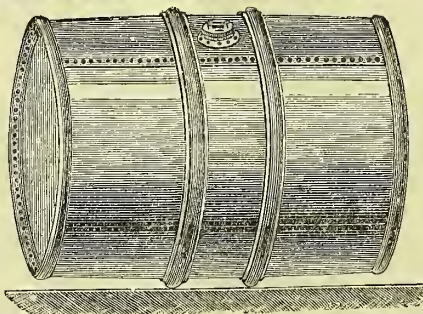
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ENAMELLED SHOW CARDS.

IRON BARRELS,

CAPACITY 40 TO 120 GALLONS
 AS PER ILLUSTRATION.

Cable and Telegraphic Address—
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These large Iron Casks, similar to sketch, can be handled with equal facility to wooden barrels, and, owing to their strength and durability, can be used over and over again for an indefinite period. They are perfectly liquid tight, being tested at a very high air pressure, and, unlike wood, do not absorb any of the contents. They are all fitted with interchangeable screw bungs, and can also be fitted with screw plug in head, for draw-off tap.

They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, “Black Iron,” “Lead Coated,” and “Tinned.”

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Prepared expressly for Oakley's Patent India-Rubber Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines. Sold in Canisters with perforated Tops to prevent waste, at 1d., 2d., 3d., 6d., 1s., 2s. 6d., and 4s. each.

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 For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6d. each.

OAKLEY'S “POLYBRILLIANT” (Registered).

A Magic Pomade for cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Pastes.
 Tins 1d., 2d., 3d., and 6d. each.

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In 1d., 2d., and 4d. Blocks, and 1s. Boxes.

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SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

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A Triumph as a Hair Darkener.
Easy to Apply.
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As a simple, effective, pleasant, and nourishing preparation it can be conscientiously recommended to a customer whose hair is becoming grey, red, or white.
Three Colours—Light Brown, Dark Brown, and Black.

Pots—3 oz. (1/6) 12/ per doz.
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GENUINE BROWN WINDSOR & HONEY SOAPS

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SPECIALITIES: Glycerine—Gum Arabic—Gum
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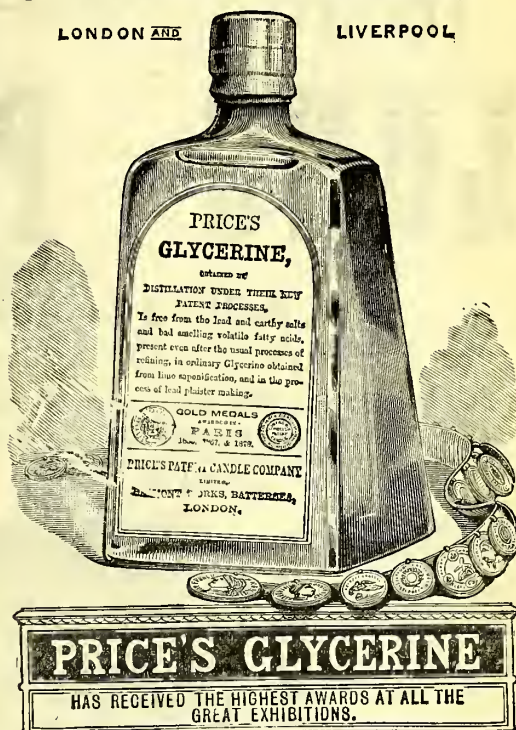
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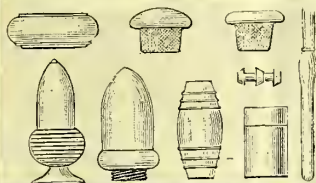
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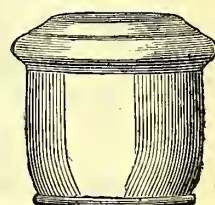
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Turners of every description of Tooth Powder, Plate Powder, Pill and Puff Boxes, used by Chemists, Perfumers, &c
All Boxes of our make are finely finished. Patentees and Manufacturers of the

SILICATED GREASE PROOF BOXES

These Boxes are turned out of Willow and Silicated inside, rendering them quite grease proof, and will be found very convenient to send by Post. They are very light, being one-sixth the weight of covered pots. They are not breakable. The lids fit quite air-tight. They will stand in any climate. They are cheap.

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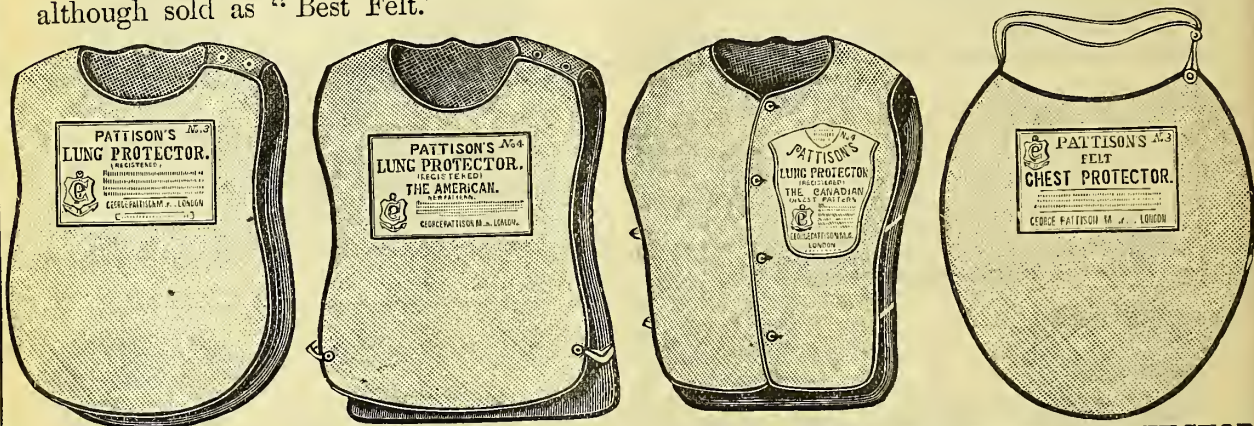
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The "LUNG PROTECTOR" continues to be made only from the same Fine Soft Wool which has always been used since its introduction, 20 years ago.

Chemists are respectfully cautioned against imitations made from lower quality Wool, although sold as "Best Felt."



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Original Pattern, Nine sizes...	10/-	14/-	18/-	26/-	34/-	42/-	52/-	60/-	70/- per doz.
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Nine sizes ...	4/-	6/-	8/-	10/-	12/-	16/-	20/-	24/-	28/- per doz.

All in Scarlet and White, and made in same Wool as the "Lung Protector."

Terms: All Wholesale Houses either allow a large Discount for Cash, or quote the goods at Reduced Net Cash prices.

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At lower prices than above, and equal to BEST of other makers, but are NOT recommended.

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MANAGER of Branch or Assistant; 10 years' varied experience; outdoor preferred; disengaged. AB., 25 Filbert Street, Bradford.

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WANTED, situation in a wholesale house; dry counter. Jennings, 89 Ablewell Street, Walsall.

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Special charges are made for Advertisements under this heading, which can be obtained on application.

FOR PRIVATE RESEARCH of every kind throughout Germany apply to W. Smart, 32 Lessing Street, Berlin, N.W. Prime references; correspondence free; trade queries and education matters attended to.

AGENTS wanted for "Dr. Birley's Anti-Catarrh" and "Baby's Blessing"; exceptionally favourable terms to special agents. Write to-day for particulars to E. Birley & Co., 1 Cecil Street, Strand, London, W.C.

TO CHEMISTS AND DENTISTS.—First-class Mechanical Work done of every description with punctuality and despatch; lessons given in taking impression of the mouth; chemists visited within 20 miles and supplied with specimens and all requisites for the business on moderate terms, or by agreement. D. McCarthy, 879 Old Kent Road, S.E.

A MOST VALUABLE AGENCY.—One Agent wanted in every town and village (where not already appointed) for Birley's preparations of Free Phosphorus; established 50 years; prescribed by medical men of first standing; unstinted supply of 40-page pamphlets, showcards, &c. Price-list and terms of agency, Gordon Murray & Co., 17 Castle Street, Holborn, London.

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ALL STUDENTS who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

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MANUFACTURER OF
ANALYTICAL, VACUUM, AND BULLION BALANCES.
Wolters' Improved Short-Beamed Analytical Balance,
A SPECIALITY.
ASSAY AND OTHER WEIGHTS OF EVERY DESCRIPTION MADE TO ORDER.
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Drugs and Chemicals.

Small quantity Howards' quinine; offers wanted, 133/14.

Soda-water Machinery.

Engine, boiler, soda-water machine, generator gasometer, filling machines for cork and patent bottles; good working order; price 55l. Hill, Chemist, Cheltenham.

For sale cheap, or exchange, a six-bottle Macdonnell's filling-machine, with all extra parts complete, for bottling aerated waters; can be seen at work at any time. Carter & Co., Soda-water Works, Bristol.

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Few patents for sale, cheap; send for list, 124/39.

Six doz. 1s., 6 doz. 6d. Hard's Food, fresh and new, at 5s. 6d. and 2s. 9d. doz., lot carriage paid. "Chemist," 17 High Street, Horn-castle.

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Pharmaceutical Journal day of issue, 7s., post free, for 1887. Heald, Burnham, Bucks.

What offer for the *Pharmaceutical Journal* for 1887, posted every Monday? 5 Ramshill Road, Scarborough.

"Oil and Colourman's Diary," 2s. 6d.; "British and Colonial Diary," 2s. 6d., free. Brooks, Chemist, Louth.

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Doses of New Pharmacopoeia, alphabetically and compactly arranged for waistcoat pocket; easily mastered; post free six stamps. John Gower, 47 Sigdon Road, Hackney, London.

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Very handsome dispensing-screen, carved mahogany with large plate-glass mirror in centre and glass cupboard on each side, and fitted with shelves at back, bought new of Trebles at a cost of 22 $\frac{1}{2}$., about 6 ft. long and 3 feet high in centre, quite equal to new and a splendid article, sketch and exact dimensions free; price, to an immediate purchaser 8 $\frac{1}{2}$., packed. W. Kemp & Son, Horncastle.

Second-hand glass specie jars, 31 in. scroll, glass cover, 35s.; 2, 23 in., arms, japanned covers stands, 3 $\frac{1}{2}$ 5s.; 4, 16 $\frac{1}{2}$ in. scrolls, flat covers 30s.; carboys, 3, 4 gal., and stands, 37s. 6d.; 3, 2 gal., and stands, 24s.; 16 gal., cut stopper, 40s.; 2, 14 gal., ditto, 3 $\frac{1}{2}$ 10s.; 4, 9 $\frac{1}{2}$ gal., plain stoppers, and massive ebonyised stands, 6 $\frac{1}{2}$.; 117 stoppered rounds, gold labelled, 4 $\frac{1}{2}$ 6s.; 260 ditto, 8 $\frac{1}{2}$ 5s.; 11 doz. pots, labelled various; 50 squats paper labels, 12s. 6d.; 45 mazarine blue pots and 20 doz. rounds, unlabelled. Hawke & Son, Wild Court, Great Wild Street, London. Remittances with orders.

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Reliable Recipes.—Cough balsam, lime and glycerine, rheumatic liniment, neuralgic tincture, cure unbroken chilblains, bronchial linctus, 6d. each; 6 for 2s. 6d. "Chemist," Edwards, Wye.

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Cigarettes (Gems), 3s., Egyptians (imported), 5s. per 100; spot paid; splendid condition. 136/5.

Sponge.—About 15 lbs. rough stable sponge, 10 to 12 to lb., 3s. 6d. per lb., or to clear the lot will take 3s. per lb. T. W. Robinson, Chemist, Myton Place Hall.

Three 56 lbs. glycerine, 1-260, offers; few gross $\frac{1}{2}$ d. boxes slate pencils, 3s. 6d.; Cadbury's cocoa essence, 5s. 2d. doz.; 1 $\frac{1}{2}$ black inks (good), 4s. 9d. gross; gum, 6 $\frac{1}{2}$ d. doz. 1d. boxes; starch gloss, 5s. 9d. gross; little thick peppermint lozenges, 3 $\frac{1}{2}$ d. lb.; large thin ditto, 3 $\frac{1}{2}$ d. lb.; extra strong, 6d. lb.; cough lozenges, 6d. lb.; chocolate lozenges, 6d. lb.; conversation lozenges, 4d. lb.; coltsfoot rock, 6d. lb.; Oriental musk, 6d. lb.; cayenne, 8d. lb.; all superior quality. Offers for any portion or quantity to Hodson, Hindpool, Barrow-in-Furness.

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Fifty gross good vial corks, 4d. gross; 50 gross Daffy's, 7d. gross, clean and white. Kemp, Horncastle.

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Six 6 or 8 gal. carboys; must be good. Particulars to Wilson, Lenton, Nottingham.

A machine for making French perles, new or second-hand. 123/23.

Few dozens Gordon's Extract; few bottles Congreve's Elixir, large. 135/39.

Second-hand rotary or cylindrical pill-machine (combined piper and cutter) and "Universal" mass mixer; must be in good working condition. Particulars and lowest cash prices to Mr. Hough, Fifth Avenue, Ilford Road, Manor Park, Essex.

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Mr. Centreton (druggists' sundriesman), late of 24 Nile Street, City Road, E.C. 40/40.

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JOURNAL OF THE TRADE. WEEKLY.

PUBLISHED EVERY SATURDAY, AT THE OFFICES, 42 CANNON STREET, LONDON; E.C.

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Exchange Column.

THE Exchange Column is a special feature of *The Chemist and Druggist*, and has proved most interesting and successful. Every week it contains about a hundred advertisements of second-hand or surplus stocks of Drugs and other necessities to the Chemist's business for disposal or wanted. It brings Chemists of all parts of the country into communication in regard to the sale and purchase of bargains, and scores of testimonials as to the usefulness and profit of this section of *The Chemist and Druggist* have been received.

We reserve to ourselves the right to decline any advertisement sent to us for this department, and, of course, general business advertisements are not admitted.

TERMS.

No Advertisement inserted in this section for less than Sixpence.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of $\frac{1}{2}$ d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or, if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

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PRIZE MEDAL,



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FLATS OR OVALS.

Size	...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		9/-	9/6	10/-	10/6	10/6	11/6	11/6	16/-	17/-	21/-	25/-	27/6	36/-	40/-

Discount: 10 per cent. Monthly, 5 per cent. Half-yearly.

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IN ORIGINAL PACKAGES DIRECT FROM WORKS.

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Size	...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		7/6	8/-	8/-	8/6	8/6	9/6	9/6	12/6	13/6	16/6	20/-	22/-	29/-	33/-

Strictly Net Cash.

CRATES OR CASKS EXTRA.

We warrant these Bottles of the finest quality Metal, good Mouths, and correct Measure.

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NATURAL MINERAL WATERS.

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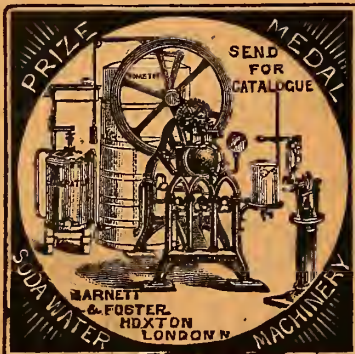
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